

TEXTILE BULLETIN

Vol. 52

May 13, 1937

No. 11

“Why do employees like to work for their companies?”

FORBES MAGAZINE recently put that question to employees of many different kinds of business and industry the nation over.

758 papers were received in the national contest.

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The employer who wants his employees to “like to work for his company” will find that the Provident group welfare program offers what employees want in the way of guaranteed insurance providing reimbursement for:

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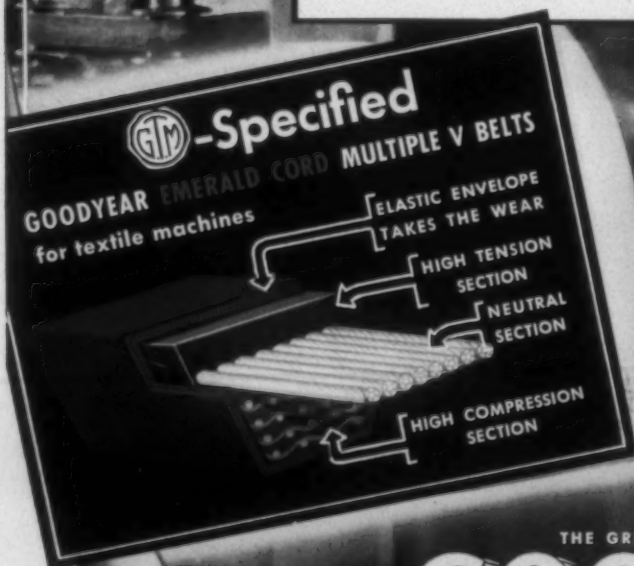
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Processing of Rayon Staple*

By Heath O. Kennette

E. I. du Pont de Nemours & Co., Inc., N. Y.

RAYON staple has been produced for a number of years, but only recently came into prominence. It produced a fabric which is distinctly different from any other textile fiber. Because of its ability to blend readily with all other known fibers, it offers almost unlimited possibilities in fabric development. At the present time, it is being used extensively in dress goods, men's suitings, necktie fabrics, upholstery, plushes, towels knitted outerwear, men's hose and a great variety of novelty fabrics. Because of its indistinctive qualities, rayon staple has earned its position in the textile industry and no doubt will become one of the most prominent textile fibers of the future.

The manufacturing of rayon staple by the producers is practically identical to that of continuous filament rayon yarn up to the spinning machine, but because of the different spinning conditions and subsequent operations, a special plant is required. The same care and supervision is just as imperative in making rayon staple as that required for continuous filament rayon yarn.

When regular rayon yarn is spun, like 100 denier 60 filament, we have 60 separate continuous filaments forming a thread. This yarn is then purified and processed to the finished product as a separate unit. Rayon staple made by this process would be prohibitive in price; therefore the producer was forced to develop a spinning machine that would spin a yarn containing thousands of filaments as a unit. After spinning, the staple is purified, cut to length, dried, opened, conditioned and baled. The staple as received by the mill is in a bale, similar in size and density to that of cotton.

Rayon staple is manufactured by both the viscose and acetate processes and can be produced in several degrees of luster such as bright, semi-dull and dull. The denier per filament can also be controlled to any desired size. The most common at present are 1.5, 3, or 5.5 denier per filament $1\frac{1}{2}$ inches in length. The fiber can be cut to any length desired. The length and fineness of the fiber affect the strength of the yarn. The longer the fiber up to 2 inches, and the greater the number of filaments in the cross section of the spun yarn, the stronger the yarn.

The hand and character of the fabric can be changed by the use of different size filaments. The 1.5 denier per filament rayon staple produces a very soft fabric. The 3 and 5.5 denier per filament produce fabrics with a different hand more closely resembling different grades of wool. By blending these fibers together, and with other fibers, such as wool and silk, many desirable and unusual effects are obtained. The blending operation is usually done before the picking, but the type of yarn desired governs where the blending will be made.

Conditioning of Staple By Mill

The proper conditioning of rayon staple by the cotton mill before processing, and the proper control of relative humidity through the mill, particularly in the picking and carding operation, has been found to be most helpful. The staple should be opened, fluffed

up, and allowed to normalize in a humidified area under mill conditions for at least 24 hours before running. The relative humidity at this stage and throughout the carding and spinning mill should be maintained close to 55 per cent for viscose process staple and close to 65 per cent for acetate staple.

Picking

As rayon staple, both viscose and acetate process, is



—Courtesy E. I. Du Pont de Nemours & Co., Inc.

*Presented at Textile Meeting, A. S. M. E., Greenville, S. C., April 7, 1937, during Southern Textile Exposition, under auspices of Greenville Section in co-operation with Textile Division, A. S. M. E.

supplied in a reasonable well opened state free of foreign matter, no cleaning operation is required. The main object of the picker on rayon staple is to prepare the staple for good carding by thoroughly opening the staple and producing a uniform, well formed lap. In general, the least amount of picking employed to produce a satisfactory lap, the better will be the condition of the fiber.

The question as to whether blade or carding beater gives the best results is open to much debate. Both types are being used with good results. Generally speaking, a carding beater will cause more neps than a blade beater, but by thoroughly breaking up the small lumps and fleecing of the staple, a more uniform lap is produced.

The speed of the beaters depends largely on local conditions and can best be answered by the mill. We have found that blade beaters operating near 1,000 R.P.M., and carding beaters near 800 R.P.M. give very good results. Fan speeds slightly in excess of the beater speeds work satisfactorily.

Because of the greater density of rayon staple as compared to cotton, it is generally necessary to reduce the speed of the hopper feed. The production of the picker on rayon staple is comparable to that of a good grade of cotton.

The weight of the lap depends largely on the counts to be produced. A 12 to 14 oz. per yard finished lap gives a very good working weight.

Rayon staple can be successfully handled by the conventional cotton pickers or by the one-process picker without major changes.

Carding

It has been found in general, that if the card is in good shape and is doing satisfactory work on cotton, that no trouble will be experienced in changing over to rayon staple. Normal card settings used on a good grade of cotton work equally well on staple. The top flats should be run as slow as possible, approximately 1 inch per minute, and the top edge of the stripping plate should be set as close as possible so as to minimize the amount of strips. These strips normally can be reworked without trouble.

Sometime trouble is experienced with the web sagging or breaking. This can usually be corrected by adjusting the comb and by maintaining the proper relative humidity conditions. However, under some conditions it is necessary to increase the speed of the calender rolls.

Much has been written about removing the mote knives and replacing them with a steel under casing, but we have not found this necessary. Normally, the finer the wire of the card clothing up to 120 or 130, the better the results. We have also found that straight wire and metallic card clothing give very good results.

The following card settings have been used successfully:

Doffer speed—6 to 9 R.P.M.
Cylinder speed—165 R.P.M.
Lickerin speed—360 to 425 R.P.M.
Doffer to cylinder—.007.
Lickerin to cylinder—.007.
Flats to cylinder—.010 (all round).
Feed plate to lickerin—.012.

Drawing Frames

It has been found that much of the trouble experienced in subsequent operations is traceable to too close a roll setting on the drawing frames. Rayon staple fibers are easily stretched, therefore much care must be given to

proper spacing of the rollers. This will be governed largely by local conditions such as the bulk of the sliver produced, weights on the rollers, type of rollers and such. We prefer leather top drawing rollers, but metallic rollers also give good results. Judgment must be used in adjusting the tension gear and selecting the proper size trumpet to prevent stretching.

The following roll settings have given good results on 1.5 denier 1½-inch staple under average cotton mill conditions.

1st to 2nd—1⅞".

2nd to 3rd—2".

3rd to 4th—2⅛".

The speed, draft and production of rayon staple on the drawing frame is comparable to that of long staple cotton.

Slubber, Intermediate and Roving Frames

Because of its nature, rayon staple does not require the twist that cotton does, and because of this the front roller speed on the fly frames would be excessively high unless some change is made. Normally the speed of the fly frames are reduced about 25 to 30 per cent so as to give the same front roller speed as used on cotton. Care must be used in selecting the lay and tension gears so as to build a good package without stretching the roving. Drafts to normal to long staple cotton give satisfactory results.

We have found that the following twist factors will give satisfactory results on 1.5 denier 1½-inch staple:

Slubber—.70 to .75 times the square root of the hank roving produced.

Intermediate—.75 to .80 times the square root of the hank roving produced.

Roving Frame—.80 to .90 times the square root of the hank roving produced.

We have found that leather top rollers give the best results on fly frames. Local conditions, twists, roller weights, size of roving and the like govern roll settings. We have used the following roll settings satisfactorily:

Slubber and Intermediate—

Front to 2nd—1 15/16".

2nd to 3rd—2".

Roving frames—

Front to 2nd—1⅞".

2nd to 3rd—1 15/16".

Spindle speeds within the following limits have been used successfully:

Slubber—450 to 650 R.P.M.

Intermediate—650 to 950 R.P.M.

Roving frame—950 to 1250 R.P.M.

Spinning

In the spinning of rayon staple, drafts, speeds and production normal to cotton can be used. It has been found that rayon staple yields its maximum strength with a twist factor between 2.75 and 3.25. Sometimes it is desirable to go higher than this to get the desired hand to the fabric. Rayon staple can be twisted to produce a very nice crepe yarn, but as we go up in twist, the strength of the yarn comes down.

Because the back rollers on the spinning frames are non-adjustable and are set at less than the fiber length of 1½ inches, the floating middle top rollers has become standard practice on spinning of rayon staple.

Cork top spinning rollers give excellent results on crepe, coarse and medium yarn. On fine yarn, leather top rollers give the best results.

Generally speaking, the conventional system of drafting has given better results on medium and fine yarns; how-

(Continued on Page 31)

Machinery Developments Discussed

At Eastern Carolina Meeting

(Continued from last week)

Geo. F. Brietz, Supt., Selma Cotton Mills, Selma, N. C.: I should like to ask something about carding. If we take the sliver from each card and weigh it, say, the average is 55 grains, how much variation would you consider fair? How many grains variation would you consider fair?

Chairman: Mr. Brietz has put out a poser here. He wants to know what would be a fair variation in card sliver. Suppose we eliminate stripping from it and say all stripping is done at the same time. Somebody give us an idea of what their variation is. (I know they are not going to say it is more than it is). Mr. Brietz, I am afraid you are not going to get an answer to that. Everybody must have a variation that is too high to be admitted.

What about drawing? Does anybody know of any new developments that have come out in the last few years, or anything they want to tell us about?

E. O. Davis, Asst. Overseer Carding, No. 2 Mill, Erwin Cotton Mills Co., Erwin: I should like to ask if any new developments have been made in the clearer.

Chairman: Mr. Davis wants to know if anyone knows of anything that will help him on the clearer proposition. He is having trouble (I am guessing now) with the lint.

Mr. Davis: There seems to be some trouble from the accumulation of trash and cotton on the clearer turning loose under dry conditions, we will say. It comes through into the sliver.

Chairman: What type of clearer do you have? It is not revolving, is it?

Mr. Davis: No, sir; stationary. I should like to know if anyone can tell of any development.

Chairman: Say you have a flat type of clearer and have trouble with the clearer waste coming off and getting into the work; he would like to know if anyone knows of any new developments there or any type of clearer that would replace that.

W. T. Byrd, Overseer Carding, No. 1 Mill, Erwin Cotton Mills Co., Durham: I should like to say that it might help the gentleman there to have his clearer as tight as possible and brush it with a rather stiff brush, to raise the nap on it.

E. O. Davis, Asst. Overseer Carding, No. 2 Mill, Erwin Cotton Mills Co., Erwin: I should like to know if there is any different method or different type of clearer that was displayed at the textile show (which I was not fortunate enough to attend). Was any new type of clearer shown on the drawing?

Chairman: Did anyone see any? Personally, I did not see any in Greenville, and I am not familiar with the revolving clearers, either. I am afraid we shall have to pass that up as unanswered.

Is there any discussion on the drawing? Of course, those of us who have the five-roll high-draft system of drawing might speak of anything new in sliver loopers.

Mr. Oldham, haven't there been some changes in sliver loopers?

A. L. Oldham, Carder, Erwin Cotton Mills Co., No. 2, Erwin: Yes, sir.

Chairman: Tell us about that.

Mr. Oldham: There is a friction roll. We had lots of trouble. But now anti-friction bearings have been put on and improvements made in the electrical stop motion.

Chairman: Mr. Aiken, wasn't there some improvement made in those machines so far as safety is concerned? That is, safety for the employees.

B. F. Aiken, Carder, Erwin Cotton Mills Co., No. 5, Erwin: Yes, sir. They have put new hoods on the sliver-loop machine, so that the machine can not be started until the hood is let down.

Chairman: I thought that was correct. There is a new device, then, on the sliver looper that does not permit the hood to be raised until you stop the machine; that is, the raising of the hood stops the machine. Those of us who have that machine ought to be thankful for that. Too many fingers have gone up the spout in those machines.

Now we come to the roving machines. Of course, we have Mr. Fraser with us this morning. Since H. & B. showed this new type of roving machine, we are going to more or less jump on him. Furthermore, we are not going to do anything in asking him about his particular machine which is not within the bounds of propriety, because that is not a competitive machine—not at present, at any rate. Hence, we shall feel freer to ask him about his particular machine than we ordinarily do at meetings of this kind. Mr. Fraser, will you explain the principles and the reasons behind making those rollers vertical rather than horizontal? Maybe you might even give us a draft here on the board.

Mr. Fraser: Evidently some of you were not at the show, so I will try to give a little sketch of the principle of the machine. This machine consisted of fluted rolls; the front roll is the fluted roller. These two sections are similar to the metallic rollers of a drawing frame. These plates slide into a bracket and mesh into a gear in the back here; they are removable either while the machine is running or while standing still. The gear drives the machine around, and as it does it feeds these rollers. The principle of it is that as the cotton comes into these drafting rollers a certain amount of twist comes into it there at the same time it is drafted. If you were to take a piece of drawing sliver and point it and then twist it and draw it a good deal, the same as you would if you were trying to spin yarn by hand, it is about the same principle as this represents.

As to your question regarding the vertical position of the rollers, Mr. Chairman, it is one which should afford some discussion pro and con. When we originally began on the machine I was eager to get as nearly a straight line between the front roller and the flyer as possible, with the idea that it might eliminate some of the stretch that might probably occur at that point. However, as

you saw at the show, the rollers were moved back some and were at a slight angle.

This machine, as I have already said, will not be ready for the market within a year. There are several things we ourselves want to play with yet, before we let the mills play with it. One thing I might mention is that when we first experimented with having a direct line down we got quite a little whip between the front roller and the top of the flyer. It did not seem to do any particular harm, but personally I did not like the looks of it. So we moved the rollers on a slight angle, to remove that whip. Also, it was of interest to confine the roving as it led from the roll, to get a slight rounding on the bottom of the roving. It is pretty good practice, for anything that is soft twisted, to lie well on the bottom roll rather than to get into the bite of the roll. That runs true of filling yarns. The flyer is driven by an end shaft on the frame, by helical gears. It runs somewhere around 2100. The spindle is driven by a shaft from the frame. The spindle sits in a case here. The spindle is grooved lengthwise (up and down), so it is able to travel inside of the gear that drives it, so that as the bobbin travels up and down the spindle travels up and down but the gear drive remains stationary. The spindle itself moves up and down in this flyer. With that speed, if we used an ordinary flyer with two legs they would fly apart, so we use the pot to eliminate that and also to eliminate the effect of air drafts on the roving. There is a small tube inside the can which is slotted lengthwise, and there is also a slot in the can itself. When the presser foot is moved outward the slot in this tube coincides with the slot in the can, so you can thread it. Then the slot is closed, and the sliver is prevented from flying out or from getting any harmful effects from air currents. Also, at the speed at which the flyer is traveling most of the time, it is in the pot. So that prevents the sliver from getting too heavy.

I did not bring any pamphlets with me, because I did not expect to do any advertising. I am sorry I did not, as I could have passed them around. If any of you are interested and will write in, we shall be glad to send them to you.

Chairman: I presume one set of these rollers must be up against something solid, so they can not back off. And does the other side have a spring?

Mr. Fraser: The top rollers, instead of being weighted, are kept together with a spring device, although a weight can be added.

Chairman: So, instead of being weighted, as we are accustomed to, the sliver comes down by gravity, with a spring to push it in?

Mr. Fraser: Yes, sir.

Chairman: I should like to ask one question. At the time I was down there in Greenville they seemed to have a good deal of difficulty in putting up an end on this machine. It involved the use of a pipe cleaner, and as I don't smoke I didn't have one. Why did you make that a solid flyer. You said you did because the centrifugal force makes the flyer spread. Why didn't you use two rings there?

Mr. Fraser: The idea was to keep the bobbin inside the pot as much as possible, so that in revolving the outer layer of roving on the bobbin would not have the fibers sticking out.

Chairman: To prevent the air currents from disturbing the sliver?

Mr. Fraser: Yes. I might say, in connection with the piecing up you noticed, this machine was hurriedly gotten out for the show. While I have been working on it, in

conjunction with Mr. Harris, for about three years, we finally decided to build this machine expressly for the show. That meant really a new design for the framing straight through. We started laying that out on paper just before the first of January. If any of you have had experience in designing and making new machinery without proper jigs and so forth you will appreciate our difficulty in getting it ready for the show. The presser foot, as put on, was improperly designed for the machine, and we had to thread it the wrong way. We tried to camouflage that at the show somewhat, but evidently some of you saw it.

Chairman: Is there anything else on this subject?

Mr. Royal: I was with an overhauling crew at one time and had some trouble with the driving gears—bobbin and spindle gears and shafts. Is there any improvement in that? Are they eliminated on this machine?

Mr. Fraser: This machine is all driven by cut gears, and the spindle is driven by helical gears, which are cut, and the flyer is driven by helical gears, which are cut; and both run in grease or oil.

Mr. Royal: Do you still have your spindle drive shaft and bobbin drive shaft the same as the other machine?

Mr. Fraser: No, it is different, because your flyer is fixed and is not driven by the spindle. That is, on the ordinary machine you have the spindle, and the flyer sits on top of the spindle and is removable. That is driven in conjunction with the spindle. The bobbin is driven independently. Here the whole unit is independent. The bobbin is fixed on the spindle, and the drive to the spindle remains stationary, but the spindle moves up and down on the driving gears. The gearing is entirely different.

Chairman: To clarify his question, your gears do not have to travel, because the slot in the spindle allows the spindle to travel?

Mr. Fraser: Yes, sir.

Chairman: This is a flyer lead, isn't it?

Mr. Fraser: No, this is bobbin lead—the same as the regular machine.

C. S. Tatum, Secy.-Mgr., Pilot Mills Co., Raleigh: What do you run on it?

Mr. Fraser: We have run carded cotton, but this machine is mainly for 4.00 hank or over. Of course, you would not expect to make 7.00 hank roving out of 1-inch cotton.

Chairman: That was at the show, too, Mr. Tatum.

Mr. Fraser: One of the things that happened at the show was that the machine was set up for 1¼-inch cotton, and we unfortunately got 1⅜-inch cotton. You can appreciate the difficulty we had in running cotton all of that length.

Chairman: I wish someone would bring some 1⅜-inch cotton up here; I should like to see some one time.

I think they did a marvelous job of engineering to get the machine ready for the show in that time. Of course, there are some rough spots, which we have spotlighted, but all of them will be ironed out in time.

Is there any other discussion on roving frames?

Mr. Mullen: I have been wondering what effect long-draft roving is going to have on long-draft spinning.

Chairman: I am going to restate that a little. The poor devil who bought long-draft spinning is wondering

(Continued on Page 8)

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Your Weavers Will
Find it Hard to Earn Them
If You
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A Loom is Obsolete
When a Better Loom is Built

X Family High Speed Looms
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DRAPER CORPORATION

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New Machinery Developments Discussed At Eastern Carolina Meeting

(Continued from Page 6)

what he is going to do now that he could have bought long-draft roving and not bothered his spinning.

Mr. Miley: I think the machinery builders were very smart.

Chairman: So do I. They sold us the long-draft spinning, and now they tell us that if we will just buy long-draft roving we do not need long-draft spinning.

The usual procedure, I think, would be, where a mill has three processes of roving frames of the old type, to change to one or two processes through the use of the long-draft roving frame and introduce the package to the spinning in the largest package that it is practicable to use on the spinning, without getting the draft too long even for long-draft spinning. For instance, if you have slubbers, intermediates, and fine frames, it would be perfectly possible, you would say, if reading all the advertisements is any criterion, to do away with the slubber and intermediate, possibly put a creel on the fine frame, and draft that thing with as much draft as you formerly did with three frames.

J. W. Cates, Supt., Edenton Cotton Mills, Edenton, N. C.: Is there any limit on that draft—that long draft?

Chairman: You are talking about the long-draft roving frame now?

Mr. Cates: No; long-draft spinning.

Chairman: Well, we have a limit on the roving, a conservative limit. I shall give Mr. Fraser an opportunity to tell us what he considers a conservative limit on spinning.

Mr. Fraser: Well, I think approximately one to every one-sixteenth inch of the staple is a good rule. It seems to me quite safe to say that the average long draft is approximately 16 to 18. Some of them draft as high as 21 and 22, and I have found as high as 24, but 17 and 18 seem to be about the highest average.

Chairman: Who is drafting long-draft spinning in excess of 18? Is anyone here? It seems not. Who is drafting in excess of 16? Only one. Mr. Harden, will you tell us whether that is single or double creel roving?

Mr. Harden: Single. 1.50 hank roving, 22s warp.

Chairman: Tell us, Mr. Harden, how successful it is.

Mr. Harden: Well, it is more successful than the old way, and as far as I know now it is the best thing we have found.

Chairman: You are drafting 16 in your spinning?

Mr. Harden: A little over 16. Single creel.

Chairman: I should like to ask you further Mr. Harden, if you prepare the stock for that drafting on a long-draft roving frame.

Mr. Harden: No, I did not.

Chairman: Then how many processes of roving was it put through?

Mr. Harden: Two.

Chairman: And how many processes of drawing?

Mr. Harden: One, using the sliver-loop machine and drawing, putting it through the slubber and intermediate. The break is mighty good, I think.

Chairman: Mr. Cates, does that answer your question?

Mr. Cates: Pretty well, yes, sir. I went into a mill just the other day and noticed they were running bales in the spinning frame, and I wondered how they were doing it. (Laughter.)

Mr. Fraser: I might say that the thread manufacturers, who, of course, use very long staple cotton—1½-inch, 1 9/16-inch, 1¾, Egyptian—are running and have been running for twenty-five or thirty years a draft of 20. That is very long staple, and if you take it by sixteenths you would not consider it very long draft.

Mr. Cates: From your experience, what would you consider it should be for 1-inch cotton?

Mr. Fraser: Possibly 16 or 17.

Chairman: Mr. Fraser's machine down at Greenville was not the only one shown. Did anyone notice any change in other frames? Mr. Cates, didn't you tell me about a change you noticed?

Mr. Cates: Yes, sir, I did. I looked at all of them, of course, because I was very much interested in all the developments. The Whittin people had a new long-draft frame down there that was right interesting—super draft.

Take Mr. Fraser's frame and that frame, of course the principles are the same, so far as the drafting is concerned, as I understand it; and what I had in mind was that I wanted to find out what the limit would be, if you manufacture, say, up to 30s from a super-draft roving, just using a drawing sliver for your slubber, and then whatever hank roving it would take to give you the minimum.

Chairman: What was the main difference in the other frame?

Mr. Cates: The main difference was the system of drafting without the fibers being so separated that they would be fuzzy. In other words, I think the folding system, to put the short fibers back to the center of the roving, was the main feature and will be the success of the long draft.

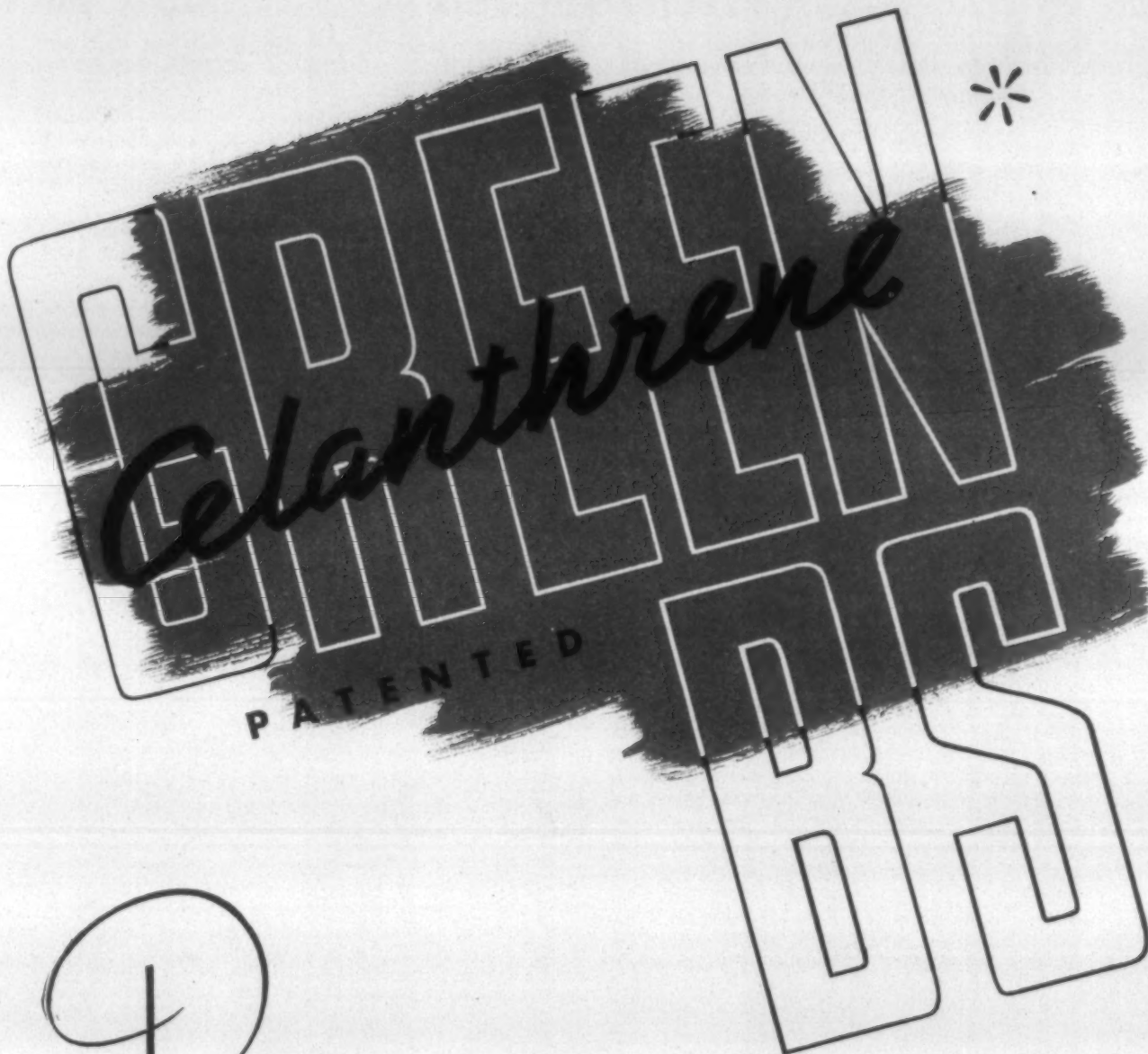
Chairman: This device I have here in my hand is a type of scroll condenser that is used on one particular frame. Another long-draft roving frame used somewhat the same idea, except that it did not use any twist. There was simply an eye that condensed the fibers and turned the two selvages in together on the second system. Then on the third system there are small plates that turn the sliver up on its edge, so in being presented to the next rollers for drafting you do not have the same edges that you had in the preceding rolls. All of those developments I thought were very interesting and will lead to considerable improvement in the fuzziness of the sliver. That is a thing you spoke of a little bit ago, Mr. Fraser, and seems to be the thing that makes or breaks the system. Is that right?

Mr. Fraser: Yes, sir, to some extent.

Chairman: I am going to ask your permission to break into the discussion for a moment now for the election of officers of the Division. I ask the nominating committee to make its report. Mr. Lanier.

D. F. Lanier, Supt., Oxford Cotton Mills, Oxford, N. C.: Gentlemen, the committee on nominations nominates Mr. J. V. McCombs, of Pilot Mills Company, Raleigh, our present vice-chairman, as chairman. Mr. J. L. James, of the Erwin Cotton Mills Company, Durham (No. 1 Mill), is nominated as vice-chairman. Mr. J. B. Batton,

(Continued on Page 10)



u Pont

has just developed a new dyestuff suitable for application on various types of acetate fibers. Known as Celanthrene Green BS, it will be of considerable interest to the dyer of acetate fiber satins, taffetas, knit-goods and combination fiber crepes. It is a homogeneous product yielding bluish shades of green, and when combined with Acetamine* Yellow 5G an interesting range of bright greens may be obtained. Celanthrene Green BS is readily dispersible and possesses generally satisfactory fastness properties, being very resistant to both dry cleaning and perspiration. It is carefully controlled during manufacture; thus, the user can be assured of uniform quality at all times.

*Reg. U. S. Pat. Off.

E. I. DU PONT DE NEMOURS & COMPANY, INC.
ORGANIC CHEMICALS DEPARTMENT, DYESTUFFS DIVISION
WILMINGTON, DELAWARE



New Machinery Developments Discussed At Eastern Carolina Meeting

(Continued from Page 8)

Sr., of Rosemary Manufacturing Company, Roanoke Rapids (No. 2 Mill), is nominated for re-election as secretary; and Mr. Virgil E. McDowell, also of Rosemary, on the board of directors.

Mr. McDowell is not so well known in this section of the State, but he has been running the carding at Rosemary for over a year now, and we should like to get him interested in this Eastern Carolina Division.

The chairman asked for nominations from the floor. None being offered, a vote was taken on the slate presented by the committee, and all the nominees were elected.

Mr. Royal: I should like to ask one more question on carding of Mr. Fraser. The long-draft roving will cut out a number of doublings, and I wonder if the machinery in the preliminary processes—opening, picking, carding, etc.—will not have to be kept in better mechanical condition in order to get even spinning.

Mr. Fraser: To answer that question might provoke some argument, in that it has never been proven that doublings make a more even roving. They did give an additional mixing, but today the properly equipped opening and picker room will provide all the necessary mixing. Long-draft roving will, however, require much more care in preparing the sliver, because with an uneven sliver you are not getting an even yarn if you are going to use long-draft roving. Of course, that runs true also where you use three or four processes, except that the unevenness appears in a different way. With long-draft roving the unevenness will appear in longer units; for instance, if you are spinning 20s yarn you might get a very long length of yarn which would size 20 and then another very long length which might size 21 or 19, whereas in two or three processes of roving that unevenness will be broken up into shorter lengths. So about all I can say is that you have to take care of your carding and drawing to get an even sliver.

Virgil E. McDowell, Overseer Carding, Rosemary Mfg. Co., Roanoke Rapids, N. C.: I noticed one thing down there that one of the builders was using and did not notice on other machines, and that was a weighting system on the top rollers on one of the long-draft frames—a speeder. I do not know exactly how new that is, but it struck me very much. It seemed that it was an equalizing of the weight on the rollers. If the sliver came through and was heavy, the weight was increased on that sliver; if light, it was lessened a little. I should like to know just how new that is.

Chairman: Can anyone give us any information on that? Is that equalizing device new?

Mr. Holden: I don't know how new it is, but I really think it is a very clever device.

Chairman: From my recollection, that was a three-point suspension, was it not, and supposed to increase or decrease the effective weight on the sliver according as to whether it was lighter or heavier than normal? I don't understand the theory behind it. I am afraid I can not help you.

Mr. McDowell: I understand the theory myself, but I just wondered whether it is something new.

Chairman: Is there anything further on this? If not, we will go to spinning. What is new or different in spin-

ning? Mr. Hughes, did you see anything different at Greenville this time?

R. A. Hughes, Overseer Spinning, Winding and Warming, Erwin Cotton Mills Co., No. 5, Erwin, N. C.: I noticed the Whitin people are putting out a new spinning ring holder that you can change from filling to warp without any other adjustment. For instance, I can take out the filling plate holder and put in a warp ring and increase the weight—just take out the filling ring and base, which is fastened in there, and put in a warp ring.

Chairman: The theory of that is that if the ring is already in the right place the spindle is plumb in its original position, and you simply take out that ring and plate holder and put in another ring, on the theory that if the first ring was concentric this ring would have to be?

Mr. Hughes: Yes, sir.

Chairman: Did anyone else see anything new down there? I know I saw something new; that was a system of Casablancas long draft which you could just simply pick up and walk off with without stopping the frame. This particular frame had a system by which you could take off both the bottom and top apron and all the arrangement that held it, without stopping the frame. Did anyone else see that?

Mr. A.: I saw that.

Chairman: That would simplify the matter of putting on aprons, wouldn't it?

Mr. A.: It is just like putting in bobbins now.

Chairman: That is right. That was a very ingenious device, I thought, though I did not have opportunity to look at it as closely as I should have liked.

Mr. Harden: I should like to ask a question. If anyone has put in the long-draft spinning and roving, or super-draft roving, I should like to find out their experience on using a single or a double creel, and which they prefer. Does the double creel with the long draft in the card room and the spinning room make their yarn any smoother than the single creel?

Chairman: Can anyone give us any light on it? Frankly, I have never run it double, but I am not prepared to say on that.

Mr. Fraser: I think one of the main points on double roving in the creel, both in the roving and in the spinning frame, is the point that where you run two ends you get the effect of twisting two ends. If you will take a roving (take a coarser hank, which is easier to see) and untwist it, you will definitely find two ends twisted together. You can find it in coarse yarn, also. Where you use a single roving in the creel you will not get that effect. That is why, as a rule, double creeling will give a stronger yarn than single creeling.

Mr. Cates: How far should you go? We take for granted that coarse yarn is all right with single roving, but when do we quit coarse yarns? That is ordinary carded yarn. How far should we go in numbers before we say that we should have double roving to get evenness? That is one thing in which I am deeply interested, and I should like to have somebody answer it.

Mr. Harden: I am much interested in that particular thing right now, and that is the reason I brought this question up. Mr. Cates asked the question, I believe, how far you can go with the single creel in spinning before you go to double creeling. I do not know that I can answer definitely, but I would say you can go right far. What we are up against, we put in the long-draft spinning

and on fairly fine numbers put in super-draft roving. There where you have the advantage of quite a draft on your roving frame, wouldn't it be an advantage, since you have cut out a number of roving frames, to double up on your spinning. I think, Mr. Cates, you can go quite a long way, provided you have enough doubling back there in your card room, before you come to the spinning. It has been my experience that you can make right fine numbers from single creeling.

G. E. Moore, Supt., J. M. Odell Mfg. Co., Bynum, N. C.: We have tried both, and could not get by with it satisfactorily. We put in double-creel roving, and it is a great deal better. You fellows that weave up your yarn might be able to get by with it; you can hide your sins in your cloth somehow or other; but we can not do it.

Mr. Tatum: Do you use the same hank when you double as you do on single?

Mr. Moore: No, we lighten up on it a little.

Mr. Harden: Did you make any change in the card room?

Chairman: When you were running that single did you have fewer processes than when you were running it double?

Mr. Moore: We had one more process. With this double roving we are making it from a controlled-draft intermediate. I don't know whether there is a great deal of difference or not.

Chairman: So you had three processes for the single creel?

Mr. Moore: That is right.

Chairman: How you have two processes for the double creel?

Chairman: That is just what you wanted to know, Mr. Harden, isn't it?

Mr. Marden: That is just what I wanted to know.

Chairman: In other words, when you lose all those twisting actions in the card room you probably have to compensate for it in the spinning.

Mr. Cates: I am experimenting now. The reason I am interested in this limit is that I am wondering if I can

spin just as successfully, in the same single-creel spinning, roving made on two processes, including a long-draft roving frame, and one-process roving.

Mr. Fraser: I am a "damn Yankee," so I am conservative. There are a lot of answers to these questions, because you run into different conditions. I was interested in the remarks of Mr. Moore, who makes knitting yarns. I have seen some very beautiful yarns; they looked wonderful; yet if you knit them up into fairly fine stockings you see shadows in them, and the knitting men kick like the devil. So a lot depends on the use you make of the yarn. If you are using double roving in your spinning now, on three processes, and you cut out one or two processes by means of long-draft roving and still use double creeling in spinning, you should get as good a yarn as you get without the long-draft roving. That has been our experience as far as we have gone.

There is one point that might be mentioned in regard to long-draft roving. Of course, long-draft roving has been handled in two ways; there is long-draft roving on the intermediate and long-draft roving direct from the sliver. When you make a roving direct from the sliver you will probably find that you can put more twist into it than you do on your regular roving and still get a softer roving than you get from the double creel. As I said, when you have two ends up you get the effect of twisting two ends, so the twist makes the roving harder with double creeling than it does direct from the sliver.

Chairman: The manufacturers used to tell us that as little twist as we could possibly run in our roving without stretching in the spinning creels was a most desirable point. Do you think that holds true with long-draft roving, as well as the other? Or do you think that ever held true?

Mr. Fraser: I think that depends, again, upon local conditions, and somewhat upon the cotton. We have run into conditions where it appeared to be better to add some twist to the roving. In other places we have run into conditions where twist had to be taken out of the roving and produced a much better yarn. There are so many angles to all these questions that it is very difficult to answer them in mass. Every mill has its own particular problems, as every machine builder knows, and a

(Continued on Page 14)

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THE KEEVER STARCH CO.

COLUMBUS, OHIO

Power Discussed at Master Mechanics' Meeting

(Continued from last week)

Chairman: Mr. Vaughan, how would you make your repairs if you were putting in new grounds?

Mr. Vaughan: Ground into one.

Chairman: That is, if you were putting in a new job you would have all your system grounded into one?

Mr. Vaughan: That is right. I would not use less than No. 6.

Mr. Abernathy: What is the objection to following the code on grounds, which uses the approved ground plants and jumps around the ends of the conduits? Has anybody had any trouble about that, or has anybody any objection to it? We have a code for that and also a safety code in our insurance, and we follow that in our grounding.

Chairman: I believe the code calls for that jumping around the boxes.

Mr. Abernathy: Yes, sir. Is there any objection to following that?

Chairman: I don't know of any. Does anybody know of any objection to that? Is there any more discussion on this grounding?

Mr. Phillips: We were just talking here among ourselves for a minute or two. You fellows are certainly constantly watching your motor bearings and are watching your switch boxes and your compensators and your fuse clips; but so often, I have been told, and I know it is a fact, you never pay any attention to the ground after it has once been put on. Why is not your ground just as important as your bearings or your contact or whatever else might be around your equipment?

Mr. Abernathy: So far as the ground is concerned, it is not worth a cent so far as the efficiency of the motor is concerned; and so far as lightning and other interference goes, it is a hazard. At our plant all conduit is grounded and all boxes are banded around from conduit to conduit with a jumper and No. 8 wire, at least. The conduit is tied to water pipes at every convenient place, with sufficient ground on there. In other words, the conduit is grounded and all boxes bonded together, and water pipes grounded and all boxes banded together, and water pipes open it would be a very rare case that the man would get sufficient current to harm him, because it is all grounded. But so far as the ground carrying off the lightning and all that, it does not do it. As I said, we tie the conduit to the water pipe in various places, and there is little likelihood of anybody's getting in trouble anywhere.

Mr. Phillips: I hate to argue with the gentleman there, but I think the high pressure that comes in during storms ought to be dissipated, if possible. We have been discussing today whether the supply that enters the building gets to the ground as quickly as possible. We cut loose a number of motors, it seems to me, if we do not have that protection. I think the ground is very, very important. There are a number of ways to put it in. The folks that supply us go to a lot of expense to keep it off their equipment, and they have a number of engineers

planning those things. So why should we not give it consideration, too?

Mr. Abernathy: Let's get some of these Duke Power Company fellows or somebody that knows the difference between a lightning arrester and a ground to talk on this.

I made the statement there that so far as the efficiency of the motor is concerned the ground is not worth a cent. The ground is put there to keep the effects of the motor from the person who may take hold of the loom. So far as the efficiency of the motor is concerned, it does not add anything.

Chairman: Is there anything more on that?

David Clark, Editor, Textile Bulletin, Charlotte, N. C.: Mr. Chairman, Mr. Griswold, of the Charlotte Fire Department, who is here, has to go back to meet someone who is waiting for him, so I suggest that we hear from him now.

Chairman Hatley: Yes, sir.

I know we are all interested in fires in cotton mills, and it is a subject of great importance to us. So I thought it would be helpful if we would get someone who knows all about it to tell us something about fire equipment, fire fighting, and the best way to handle burned cotton, and things like that. I did not know of any better source of information than the Charlotte Fire Department, so I asked them to send someone, and they have sent Chief Griswold. We shall be glad to have him now tell us something about fire equipment and so forth. I present Chief Griswold.

C. M. Griswold, Asst. Chief, Charlotte Fire Dept., Charlotte, N. C.: Mr. Chairman, it looks to me as though most of these men are from out of town; and I should like to extend, through the Fire Department, the welcome of the city to the visitors.

I got caught rather short on this assignment; in fact, I just discovered it a short while ago. The chief of our fire department is sick, and he asked me to come down here this morning to talk to you.

You gentlemen have already, through your efforts, made a great advancement in fire protection than any other organization or group in the United States of America. It is because of your suggestions and your constant care that the fire losses in textile properties are kept to a very low minimum. In spite of the fact that our loss of life is running close to 10,000 a year, it is comparatively seldom that we hear of a man's being burned to death in a textile plant. The chief reason for our lack of knowledge of fire prevention in the textile industry is that through the efforts of you gentlemen whose properties are practically all sprinklered.

We have had no textile mill fires to amount to anything, except in 1934, during the time I have been in Charlotte. That consisted mostly of fires in cotton warehouses. Out of possibly somewhere near thirty fires we lost only one building. This was an unsprinklered building closely adjoining a crossing track from a building housing probably \$50,000 worth of cotton. The building was equipped with a shed, and the first effort of the fire department was, of course, to stop the spread of the fire,

and the first four hose lines were laid to cover the exposure. The first duty of anyone fighting a fire, whether it is a fire department or a master mechanic, with the exception of the saving of life, is to stop the spread of the fire, regardless of what may be burned.

I am wondering if practically all the properties over which you gentlemen exercise your influence are not sprinklered. Is that correct, Mr. Chairman?

Chairman: Yes, sir, that is correct.

Mr. Griswold: Then it strikes me that attention to and improvement in the sprinkler systems would be the end to which you should work. To that end I will try to recall, partially from memory, fire records in sprinklered property, and perhaps I can recall some of the causes of faulty sprinkler systems.

The 37-year record of the National Fire Prevention Association includes 65,667 fires. Of this number, 38,892 were practically or entirely extinguished by the sprinkler systems. The sprinkler systems held the fire in check, so that it was extinguished with the aid of hose streams, in 14,000 and some odd cases. (I can't remember the odd hundreds in that. It is 26 per cent.) Two thousand two hundred and fire fires were not controlled by the sprinkler system.

I know that a considerable number of textile properties also have hydrants supplied from standpipes or city water supplies.

Now, the 38,892 is 70 per cent, so that is very good. The 14,000 and some odd run around 26 per cent, and the 2,205 run 4 per cent. So that leaves 30 per cent that need your attention.

The majority of sprinkler systems, I believe, are designed to provide water through 35 per cent of the heads. Lack of adequate water supply is one of the causes for the losses in sprinklered risks, and cutting the sprinkler system off for repairs or to reseal some valves or things of that nature are ordinarily responsible for failure of sprinkler systems. In 1936 we lost a building; it was a waste plant in which a very inferior quality of merchandise was handled, and the sprinkler system was cut off for repairs, to reseal some valves. Six days before this fire occurred another fire had occurred in the same building. We went down and put the first fire out and restored the sprinkler heads. The place was very dirty; dust and lint had accumulated everywhere. I told the foreman to keep the place a little cleaner and prohibited the operation of such machines as pickers and conveyors during the times that the sprinkler system was shut off. I told him he would certainly lose the plant and possibly some lives unless he did. Six days later the fire occurred. When we arrived the building was in a state of collapse, and the plant burned to the ground.

There is one of the causes. When you are making repairs to a sprinkler system, those parts of the work that create fires or friction of some metal part, and conveyors that would convey fires to different parts of the building, should not operate. Shut them down when the sprinkler system is cut off.

When you have a fire in warehouses where cotton is stored your sprinkler system will not put the fire out. I have been in buildings and watched it before the arrival of the fire apparatus, when there was some question as to where the fire was. The sprinkler system will not stop it. After a fire has occurred, you stop the fire, ordinarily, with your hose streams in cotton warehouses. The system we use is that then that cotton must all be moved out to an open field, where each bale is stacked separately, so that you can walk all the way around it. In the center we lay a large hose line, and then we branch out with small nozzles. We have men there to watch the cotton,

both day and night, for from seven to ten days. With the exception of a few bales we are able to extinguish the fire from the outside. It is not the same as cotton packed with a spark of fire from the gin.

Getting back to the subject of sprinkler systems, it has been estimated that there is about \$40,000,000,000 worth of property in the United States that is protected by automatic sprinklers and that the fire loss on this property is not more than 10 per cent of what it would have been without sprinkler protection. The records available for losses to properties of the better class show a fire loss of from two to three cents to the \$100 worth of property value. It is fair to estimate that it would be at least ten to twenty times as great without the sprinkler protection. According to those figures, the annual savings by reason of sprinkler protection would approximate \$200,000,000. The annual fire loss for the entire United States runs from \$400,000,000 to \$500,000,000, and you can see that it would be very much greater without sprinkler protection.

I thought you gentlemen would be interested in this, by reason of the fact that you are master mechanics in an industry that uses more sprinklers than possibly any other group in the country. Through this agency we are saving one-third of what the fire loss to the United States would be without sprinkler protection.

Getting back to the loss of life, it is, I think, one of the most glowing tributes that could be paid directly to you gentlemen that the loss of life in the textile properties, from fire, is probably the lowest of any industry in the country.

Many of you can recall, without any effort, that twenty years ago this month war was declared. The loss of life and the wounded among our soldiers ran over 300,000 I believe. Since that time, at the average rate of 10,000 a year, we have lost 200,000 lives by fire, and countless people have been injured.

I know of nothing so worth while as the safeguarding of life and property, and I think it is the finest thing in the world that you have asked a fireman to come down here and say something about that. I want to apologize for not being better prepared to talk to you. I think nothing could be finer than your interest in the protection of life and property in this country.

During that same period, with an annual fire loss running around \$500,000, we have lost in properties and money values approximately \$20,000,000,000 which is somewhere near the Allied war debt to the United States.

Today we have a serious problem—something with which none of us have anything to do as a group, we might say, though perhaps in a way we should, but which many of us are responsible for as individuals. I mean the general public—the population at large. That is the great loss of life by the automobile traffic. But were it not for the efforts of such groups as you gentlemen to protect your people from fire (and not only to protect them from fire but through the other means that you use throughout your work to safeguard them from injury), the loss of life through fire and injury would no doubt be twice that of the automobile death rate today.

Gentlemen, I am really ashamed not to have more information to give you. If there are any questions you care to ask me, probably you could give me some inspiration. I appreciate the fact that you invited the chief down. He is in bed at this time with a dangerous complication. I am as sorry as can be that we got our wires crossed, but I did not know about this and could not prepare anything. If there is anything you want me to talk about, whether it is sprinkler systems or electric wiring, just let me know. A fireman is not a mechanic; he is a

(Continued on Page 20)

New Machinery Developments Discussed At Eastern Carolina Meeting

(Continued from Page 11)

particular location may produce a very unusual problem. A few minutes ago a gentleman was speaking of top clearers on drawing frames. I was thinking, "I hope they will not ask me to answer that question," because there are so many conditions that enter into it. But if you went into a mill and analyzed the situation somewhat you might find the solution to their problem readily obtainable.

Mr. Cates: The machine builders are all leading us into this new process that we have been discussing; they are leading us into it, and we are supposed to follow. It is supposed to be progress. They are taking out two of the processes and leaving one and are charging us three times as much for the one process as they did for the three. I have experimented, and I can not tell any difference. I have experimented with 1.60 single creel on 24s, and have both broken and blackboarded, and find practically no difference. That is the thing I was leading up to a while ago. They are leading us this way in elimination of the processes, and how far can we go in the drafting?

It has been very interesting to me to have you answer that, and I appreciate it very much.

Chairman: We shall have to cut this discussion short; it is nearly time to adjourn.

Mr. Cates: Mr. Chairman, go to twisting for about one minute. In the large package, twisting, say, $3\frac{1}{2}$ -inch ring, what is the logical spindle speed? What is the maximum? I might put it that way. Of course, you can have a minimum; you can run as slowly as you want. But what would be considered maximum speed, new type twisting, large package, with a $3\frac{1}{2}$ -inch ring?

Chairman: That is a plain grease ring?

Mr. Cates: Yes, sir, plain ring.

Mr. Fraser: The maximum is approximately 5,000 feet a minute on the traveler, which will give you a spindle speed of about 5,500 on a $3\frac{1}{2}$ -inch ring. Not but that some people have run at a higher speed. There is one mill I know of where we put some twistors in with $3\frac{1}{2}$ -inch ring, and they run at 6,100. But as machine builders we have to be somewhat conservative in what we tell the mill men about the speeds they can get.

Mr. Cates: Does that depend somewhat on the numbers you are running?

Mr. Fraser: It depends somewhat on the numbers and also on the grade of stock, also on the method of greasing travelers, the height of the ring, the depth of the ring, suitable size for the work. It is all dependent on the ring and traveler. This ring here is a new type of ring which is not being produced yet, because it requires a special machine to put these grooves in. It is a grease groove ring instead of an oil ring. The claims are that it will operate at higher speed than the oil ring and higher traveler speed and will have a long life.

Chairman: As there any questions or discussion on warping? Dyeing? Slashing? There was quite a bit of absolutely automatic control for moisture content and so on at Greenville that was of interest.

If there is no further discussion of the processes, I take this opportunity to turn the meeting over to Mr. McCombs, our new chairman.

Mr. Tatum: I regret to say, Mr. Chairman, that Mr.

McCombs had to be in South Carolina today, on account of serious illness in his family, and could not be here.

Chairman: Is the new vice-chairman here? I guess we shall have to pass up speeches by the new officers.

Before we adjourn I wish to thank you in my own behalf and on behalf of the executive committee and other officers for all the co-operation and appreciation you have given us. It has not been a great burden, because I do not think any of you who have ever been told to be here have ever turned down an assignment. I think that is unique. I thank you from the bottom of my heart for this co-operation, and I feel sure you will give Mr. McCombs and the other officers the same fine co-operation you have given me.

If there is nothing else to come before us, the meeting is now adjourned.

Speakers At American Cotton Manufacturers Meeting

Harry L. Hopkins and Senator John Bankhead will address the American Cotton Manufacturers' Association meeting at Washington, May 12th-14th, according to W. M. McLaurine, secretary. The first session of the convention proper will be held May 13th. Mr. McLaurine will report and Donald L. Comer, president, will make his annual address. E. A. O'Neal, president of the American Farm Federation, and Senator Bankhead will also speak.

At the afternoon session, Cason J. Callaway, of La-Grange, Ga., will report on the manufacturers' visit to Japan, and Marvin Jones, chairman of the House Committee on Agriculture, will speak.

The annual banquet will be held Thursday evening, May 13th, with Mr. Comer as toastmaster. Mr. Hopkins will make his address at this session.

At the Friday morning session, C. S. Ching, director of Industrial and Public Relations for the United States Rubber Products Co., will speak. Committee reports will be made and officers elected.

Monroe To Get Hosiery Mill

A group of Monroe, N. C., business men have just opened a drive to sell \$35,000 worth of stock in a proposed hosiery mill, which will be erected in Monroe.

The interested group is headed by A. M. Secrest, as chairman, H. H. Wilson, Carr Bowie, F. M. Smith, J. M. Morrow and Claude Eubanks.

The building will be 105 feet by 170 feet, housing 40 hosiery machines. The mill will employ about 150 people with an average weekly payroll of \$3,000.

It is understood that an outside manufacturer has agreed to subscribe \$150,000 of capital stock if Monroe business men would place \$35,000 in shares. The name of the manufacturer was not made known.

Machine Takes Finger of Erwin Mill Employee

Erwin, N. C.—Roy Pope, employe of the Erwin mills here, was injured recently while at work when his right hand became entangled in the machine he was operating in the opening room at the mill. He was rushed to a local hospital where physicians amputated one of his fingers.

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Mill News Items

GRAHAM, N. C.—A new Einsiedel-Reiner hosiery machine has been installed in the Scott Hosiery Mills. This makes the 24th of this type at the mill.

NINETY-SIX, S. C.—At the Ninety-Six Cotton Mills work is going forward on overhauling all of the machinery of the mills. The mills are engaged in the manufacture of print cloths, using 54,270 spindles and a battery of 1,380 looms.

GASTONIA, N. C.—The Firestone Mills, Inc., is having many of the dwellings of the village reroofed with fire-proof roofs. Other renovations are being made where necessary to the dwellings.

GASTONIA, N. C.—The old store building at the corner of Second avenue and Linwood street is being entirely remodeled by the Mill Devices Company. It will be used by the Carter interests in connection with work in the main plant.

ENKA, N. C.—The American Enka Corporation has let contracts for structural steel for a paper storage building, \$9,100; and for a boiler house addition, awarded to Southeastern Construction Company of Charlotte at a price that was not announced.

MARTINSVILLE, VA.—The Fontaine Converting Works, Inc., recently purchased new machinery in order that production may be increased and to take care of the steadily growing volume of business. This company is engaged in finishing rayons and acetates.

LYNCHBURG, VA.—In the new addition under construction at the Lynchburg Hosiery Mills dyeing machinery will be installed. The addition has been built at an expenditure of over \$25,000, exclusive of machinery, and measures 50x140 feet, and is two stories.

RADFORD, VA.—City Manager H. T. Roberts has announced that the Burlington Mills Corporation of Greensboro, N. C., will erect a silk plant in Radford. An 11-acre site has been purchased and engineers have begun work preparatory to construction. The plant will employ 400 persons and will manufacture dress goods.

CLINTON, S. C.—Work is going forward at the Lydia Cotton Mills on an enlargement and renovation program, representing an expenditure of \$250,000. An addition has been under construction. Four hundred and three looms will be installed, bringing the total number to 1,209. Additional spindles will also be installed. The spindles will be increased to 50,000, from 33,216, which the company has been operating. The company has been operating a battery of 806 looms, the additional 403 will bring the number to 1,209. Print cloths and carded broadcloths are manufactured.

HICKORY, N. C.—Charles W. Knott has started his hosiery mill with 43 machines, and the product will be sold in the gray. Mr. Knott was formerly associated with the Hollar Hosiery Mills, and has had 12 years' experience in the hosiery industry.

LYNCHBURG, VA.—Henry B. Stimson, secretary and treasurer of the Consolidated Textile Corporation, said at the reorganization hearing in New York that the Southern plants had booked orders sufficient to keep them busy for the next few months at the higher prices which prevailed before the recent drop.

LANCASTER, S. C.—The assessment and equalization of cotton mills by the South Carolina Tax Commission for the year 1936 in Lancaster County totals \$1,806,900. The individual assessments are as follows:

Springs Mills (Kershaw plant), at Kershaw, \$320,500; Springs Mills, at Lancaster, \$1,486,400.

KNOXVILLE, TENN.—Appalachian Mills Company, underwear and outerwear manufacturers, have just purchased the good will and trade-marks in the name "Knox-Knit," well known for years in the dry goods market as the trade name of a former hosiery mill. Plans for the use of the new name by Appalachian Mills, it is understood, in its production and distribution, have not been definitely decided upon.

ABBEVILLE, ALA.—Citizens of Abbeville held a meeting recently and discussed the possibility of securing a knitting mill plant for Abbeville. Mr. Carroll, superintendent of a knitting mill at Eufaula, was present to explain this was the desired location. The proposed plant, according to Mr. Carroll, would employ from 200 to 400 people, releasing a payroll ranging from \$100,000 to \$200,000 annually, and begin operations sometime in September, according to present plans.

CHARLOTTE, N. C.—Work is scheduled to start on an addition to the dyeing department and boiler room of the Hudson Silk Hosiery Company, representing a cost of around \$25,000.

The extension to the dyehouse is for the plant of the company on North Brevard street and the enlargement of the boiler capacity for both of the Hudson plants in Charlotte.

MONROE, N. C.—Monroe Full-Fashioned Hosiery Company of Monroe has received a charter from Secretary of State of North Carolina to make, buy and sell textile fabrics, etc., under an authorized capitalization of 3,000 shares, with three shares subscribed by A. M. Secrest, W. M. Davis and J. V. Henderson, all of Monroe.

It is understood that they will install 40 full-fashioned machines which have been purchased from a Southern mill.



Problem PAGE

Devoted to Practical Questions and Answers Submitted by Our Readers

Hard or Soft Twist Bands?

Editor:

In making yarn bands for spinning frames, will not a hard twisted band last longer than one with less twist. If not, why not?
"BANDER."

Reply To "Fixer"

(What Timing for Picking Motions?)

Editor:

The correct timing of a picking motion on any loom should be as follows: When crank is on top center shuttle should begin to move.

The picking motion has a direct relation to the beating up motion or the motion of the lay. When the crank is on top center the lay is moving at its fastest speed, therefore, if the pick is too early the shuttle will leave the box while the lay is traveling very fast, and there will be a tendency for the reed to leave the shuttle. This will cause a crooked running shuttle and also cause ridges to be formed on the back of shuttle. Another defect will be that, if the full width, or near the full width of reed space is occupied, the shuttle will have to force its way into the shed and will cause selvage breakage.

If the pick is too late a stronger picker will be necessary to drive the shuttle through the shed than if the shuttle was picked on time. Of course, if the full width in the reed is occupied, a later pick than shuttle starting with crank on top center will be advantageous and necessary in order to allow the reed to recede farther back and give a wider shed for the shuttle to enter.

P. N. T.

Reply To "C. F. C."

(Why Churn Shaped Laps?—April 22nd Issue)

Editor:

The writer has had experience with cone or churn shaped laps; that is, laps larger at one end than the other.

In every instance I have found it to be in the air-current, either direct or by cotton accumulating at some point inside the picker, causing the air-current to be deflected and depositing more cotton to one side of the cages than the other.

If you find everything working properly, I suggest that you check up on every machine behind the picker to make sure that the cotton is coming through them correctly.

Look to the lap-rack friction shaft gears. It is possible

that one of those gears are loose and will revolve on the shaft.
"OFFICE BOY."

What Number Traveler?

Editor:

Will some kind reader please give me a rule to find the exact number of traveler to use on the different counts of yarn?
"TRAVELER."

What Settings for Double Carding?

Editor:

We have recently begun double carding on a small portion of our product. I would like to know what setting of cards, both on first and second carding, is recommended by practical carders for one-inch strict middling cotton on 12's to 20's yarns.
A CARDER.

Answer To "Soft Spun"

(How Soft?)

Editor:

While the writer is well acquainted with the mule, I cannot say for sure just how soft a yarn can be spun on that machine.

However, I can say that it is possible to spin yarn on a spinning frame so soft that it is very difficult to handle at the subsequent processes, especially in the spooling, warping and weaving.

In order to do this you must slow down on your spindles and speed up on your rolls.

You must also use a traveler so light that it will not pull down the ends and at the same time be heavy enough to allow the yarn to wind on the bobbin.

No one can tell you exactly how to do this so that it will apply in all cases, but it has been said that a word to the wise is sufficient.
"BEENTHERE."

How Many Ends Per Inch?

Editor:

As we are making some cloth now that is not weaving so good on account of so many ends to the inch in both warp and filling, I would like to know if there is some way to find with figures just how many ends or picks of any certain count of yarn that can be placed in one inch of cloth?

For instance, how many ends of No. 50s yarn can be placed in one inch of either warp or filling.

"MANAGER."

Resolution Concerning D. Harvey Hill

The following resolution was passed at the recent meeting of the Eastern Carolina Division of the Southern Textile Association:

"The Eastern Carolina Division of the S. T. A. wishes to pause in its meeting today to pay respect to the memory of D. Harvey Hill, secretary of our Association, who has passed into the beyond since our last meeting. The Association has suffered the loss of a most faithful and efficient officer, and all the members of the Association of a true friend who by his cheerful presence and unfailing courtesy at our annual meetings went a long way toward making the meetings a success. We shall all miss him more than we can express in words and find it a difficult job to fill his place."

Present At Eastern Carolina Meeting

The following men were present at the meeting of the Eastern Carolina Division of the Southern Textile Association at Raleigh, N. C., May 1st:

- Aiken, B. F., Carder, Erwin Cotton Mills Co., No. 5, Erwin, N. C.
 Aiken, Eugene E., Supt.'s Clerk, Erwin Cotton Mills Co., No. 5, Erwin, N. C.
 Allen, Herbert, Asst. Overseer Spinning, Erwin Cotton Mills Co., No. 4, West Durham, N. C.
 Batton, J. B., Sr., Spinner, Rosemary Mfg. Co., No. 2, Roanoke Rapids, N. C.
 Blake, W. F., Asst. Overseer Carding, Erwin Cotton Mills Co., No. 2, Erwin, N. C.
 Brietz, Geo. F., Supt., Selma Cotton Mills, Selma, N. C.
 Brown, M. C., Overseer Weaving, Erwin Cotton Mills Co., No. 5, Erwin, N. C.
 Buck, J. E., Overseer, Rosemary Mfg. Co., Roanoke Rapids, N. C.
 Byrd, W. T., Overseer Carding, Erwin Cotton Mills Co., No. 1, Durham, N. C.
 Caddell, R. C., Erwin Cotton Mills Co., No. 4, Durham, N. C.
 Caldwell, E. R., Overseer, Erwin Cotton Mills Co., No. 5, Erwin, N. C.
 Capps, Parker, Card Room, Selma Cotton Mill, Selma, N. C.
 Carr, F. W., Asst. Overseer Carding, Erwin Cotton Mills Co., No. 5, Erwin, N. C.
 Carrow, C. L., Jr., Asst. Overseer Carding, Erwin Cotton Mills Co., No. 1, Durham, N. C.
 Cates, J. W., Supt., Edenton Cotton Mills, Edenton, N. C.
 Clark, David, Editor, TEXTILE BULLETIN, Charlotte, N. C.
 Connell, W. D., Foreman, Mill No. 2, Roanoke Rapids, N. C.
 Crawford, R. H., Asst. Overseer, Erwin Cotton Mills, Mill No. 2, Erwin, N. C.
 Creech, J. O., Overseer Spinning, Spooling and Warp Div., Selma Cotton Mills, Selma, N. C.
 Davis, E. O., Asst. Overseer Carding, Erwin Mills Co., No. 2, Erwin, N. C.
 Draughan, C. B., Asst. Overseer Spinning, Erwin Mills, Durham, N. C.
 Ennis, H. C., Section Hand, Erwin Cotton Mills, No. 1, Erwin, N. C.
 Faircloth, W. I., Section Hand, Erwin Cotton Mills, No. 5, Erwin, N. C.
 Faris, A. W., Overseer Spinning, Erwin Cotton Mills, No. 4, Erwin, N. C.
 Fields, J. E., Asst. Spinning, Erwin Cotton Mills, No. 5, Erwin, N. C.
 Finley, L. C., Overseer Weaving, Pilot Mills, Raleigh, N. C.
 Fonville, John C., Editorial Dept., Cotton, Atlanta, Ga.
 Forrester, J. T., Follow-up, Patterson Mills, Roanoke Rapids, N. C.
 Fraser, Wm. McL., Asst. Gen. Mgr., H. & B. American Machine Co., Pawtucket, R. I.
 Garner, J. T., Spinner, Rosemary Mill, No. 3, Roanoke Rapids, N. C.
 Griffiths, E. M., Overseer Carding, Selma Mill, Selma, N. C.
 Gurley, J. B., Rosemary Mfg. Co., Roanoke Rapids, N. C.
 Harden, M. R., Supt., Erwin Cotton Mill Co., Durham, N. C.
 Harris, Paul J., Spinner, Selma Cotton Mills, Selma, N. C.
 Hart, T. R., Professor Weaving and Designing, Textile School, N. C. State College, Raleigh, N. C.
 Henry, J. O., Yarn Sizer, Oxford Cotton Mills, Oxford, N. C.
 Hodges, W. T., Supt., Roanoke Mill, No. 2, Roanoke Rapids, N. C.
 Honeycutt, W. T., Overseer Carding, Sterling Cotton Mills, Franklinton, N. C.
 Horner, Edward C., Overseer Carding and Spinning, Oxford Cotton Mill, Oxford, N. C.
 House, T. M., Section, Erwin Cotton Mills, No. 5, Erwin, N. C.
 Howell, C. W., Asst. Supt., Erwin Cotton Mills, No. 6, Durham, N. C.
 Hughes, R. A., Overseer Spinning, Winding and Warping, Erwin Cotton Mill, No. 5, Erwin, N. C.
 Jackson, Ottis F., Asst. Overseer Spinning, Erwin Cotton Mills, No. 4, West Durham, N. C.
 Johnson, E. C., Asst. Winding and Warping, Erwin Cotton Mills, No. 5, Erwin, N. C.
 Knight, R. H., Carder and Spinner, Erwin Cotton Mills, No. 6, Durham, N. C.
 Lanier, D. F., Supt., Oxford Cotton Mills, Oxford, N. C.
 Lassiter, C. T., Salesman, Penick & Ford, Ltd., Greensboro, N. C.
 Lee, Joe, Asst. Overseer, Card Room, No. 2, Erwin Cotton Mills, No. 2, Erwin, N. C.
 Lewis, R. H., Erwin Cotton Mills, Durham, N. C.
 Linker, H. R., Section, Erwin Cotton Mills, No. 4, Durham, N. C.
 Long, D. E., Overseer Spinning and Carding, Oxford Cotton Mills, Oxford, N. C.
 Love, Dock W., Overseer, Erwin Cotton Mills, No. 4, Durham, N. C.
 Lyles, A. B., Spinner, Rosemary Mfg. Co., Roanoke Rapids, N. C.
 Lyon, H. Grady, Asst. Carder, Erwin Cotton Mills, No. 4, Erwin, N. C.
 Marley, A. R., Supt., Plant No. 6, Erwin Cotton Mills Co., Durham, N. C.
 Matthews, Carl, Asst. Overseer, Erwin Cotton Mills, Erwin, N. C.
 May, Robt., Second Hand, Sterling Mills, Franklinton, N. C.
 McDowell, Virgil E., Overseer Carding, Rosemary Mfg. Co., Roanoke Rapids, N. C.
 McGee, J. E., Asst. Supt., Rosemary Mfg. Co., Roanoke Rapids, N. C.
 McIver, Evan G., Jr., Erwin Cotton Mill No. 1, Durham, N. C.
 Miley, W. H., Jr., Supt., Erwin Cotton Mill No. 2, Erwin, N. C.
 Moore, Bernice, Section, Erwin Cotton Mill No. 5, Erwin, N. C.
 Moore, G. E., Supt., J. M. Odell Mfg. Co., Bynum, N. C.
 Moore, T. L., Section Hand, Erwin Cotton Mill No. 5, Erwin, N. C.
 Moore, W. C., Asst. Overseer, Erwin Cotton Mill No. 2, Erwin, N. C.
 Moore, William, Section Hand, Erwin Cotton Mill No. 5, Erwin, N. C.
 Morgan, J. M., Overseer No. 2, Spinning and Winding, Erwin Cotton Mill No. 2, Erwin, N. C.
 Moss, J. D., Asst. Weaver, Erwin Cotton Mill No. 5, Erwin, N. C.
 Mullen, Supt., Rosemary Mfg. Co., Roanoke Rapids, N. C.
 Nelson, Thomas, Dean, N. C. State College, Textile School, Raleigh, N. C.
 Oldham, A. L., Carder, Erwin Cotton Mills No. 2, Erwin, N. C.
 Parks, P. B., Jr., Supt., Erwin Cotton Mills No. 5, Erwin, N. C.
 Parrish, R. F., Night Carder, Selma Cotton Mill, Selma, N. C.
 Parrott, S. E., Oxford, N. C.
 Pendergrass, Fixer, Erwin Cotton Mill No. 4, West Durham, N. C.
 Purcell, D. A., Supt., L. Banks Holt Mfg. Co., Durham, N. C.
 Raspberry, W. E., Asst. Carder, Erwin Cotton Mill No. 1, West Durham, N. C.
 Roger, W. R., Asst. Supt., Patterson Mill Co., Roanoke Rapids, N. C.
 Rouse, R. H., Overseer Weaving, Pilot Mill, Raleigh, N. C.
 Royal, B. Ellis, Associate Editor, TEXTILE BULLETIN, Charlotte, N. C.
 Rays, B. F., Foreman, Rosemary Mfg. Co. No. 3, Roanoke Rapids, N. C.
 Sanders, J. R., Section, Erwin Cotton Mill No. 5, Erwin, N. C.
 Seawell, Weaver, Selma Cotton Mill, Selma, N. C.
 Sessions, C. L., Asst. Overseer Spinning, Erwin Cotton Mills No. 2, Erwin, N. C.
 Shinn, W. E., Associate Professor Designing, Textile School, N. C. State College, Raleigh, N. C.
 Sink, J. L., Asst. Overseer, Erwin Cotton Mill No. 1, West Durham, N. C.

(Continued on Page 28)

Personal News

D. D. Towers has been promoted from superintendent to vice-president and general manager of the Anchor Duck Mills, Rome, Ga.

J. R. Hart has been promoted from assistant superintendent to superintendent of the Anchor Duck Mills, Rome, Ga.

Frank Lavcock, superintendent of Beacon Manufacturing Company, Swannanoa, N. C., was host to his four brothers at a reunion recently.

G. H. Lanier, president of the West Point Manufacturing Company, West Point, Ga., has relinquished his position as president of the Anchor Duck Mills of Rome, Ga.

J. B. Hall, who has been with Dixie Spindle & Flyer Co. as fitter and overhauler, is now with Dixie Mercerizing Company, Lupton City, Tenn.

Lewis M. Taunton, formerly with the Porterdale plant of Bibb Manufacturing Company, has been transferred to the No. 2 mill, of Bibb, at Macon, Ga. He is an overseer.

Joe Clement, who was formerly associated with the Pomona Mills, Greensboro, N. C., has been placed in active charge of the Dixie Supply Company in Greensboro.

M. D. Collins, formerly associated with the Eagle and Phenix Mills, Columbus, Ga., has gone to Durham, N. C., where he has become overseer of the weaving division of the Durham Cotton Manufacturing Company.

Ernest M. Boys, superintendent of Pisgah Cotton Mills at Brevard, N. C., and Miss Norma Osborne, of Hendersonville, N. C., were married recently. The groom is the son of R. W. Boys, formerly of Holyoke, Mass., president of the Green River and Pisgah Mills.

Chester Haggard has been transferred from Osprey Mill to the general offices of Bibb Manufacturing Company, Macon, Ga., taking over work in cloth and fabrics for the manufacturing and sales departments. He has been succeeded as overseer of the Osprey spinning room by M. R. Gardner, formerly with the Bibb in Macon.

Robert C. Atherholt, secretary-treasurer, Hampton Looms, Bedford, Va., has been elected president of the Lynchburg Rotary Club.

L. N. Hale, of Spray, N. C., has been promoted to be assistant production manager of Marshall Field & Co., manufacturing division. Mr. Hale has been with the company since 1933 in various capacities.

William B. Lawson, assistant treasurer and secretary of the Pacolet Manufacturing Company, Pacolet, S. C., is to be married to Miss Florence Moody of Spartanburg, S. C. Miss Moody is the daughter of H. F. Moody, retired cotton mill superintendent.

T. E. Pierce has become associated in the cotton yarn department of Iselin-Jefferson Company of New York. Mr. Pierce was at one time a member of the Perkins Hosiery Mills organization and at another connected with the Johnston Mills Company.

Ernest Fivaz, Jr., has become associated with Southeastern Cottons, Inc., Chicago office, and will concentrate on colored goods. For the past seven years, Mr. Fivaz sold for William L. Barrell Company in the same territory.

George F. Albrecht, chief draughtsman of the Saco-Lowell Shops for the past 13 years, has resigned. Mr. Albrecht went to Biddeford, Me., 30 years ago from Newton, Mass. He is a member of the American Society of Mechanical Engineers and of the Maine Society of Professional Engineers.

William B. Watkins has been made head of the Baltimore office of Southeastern Cottons, Inc., succeeding the late Charles W. Bleakley. Mr. Watkins has been a salesman in the Baltimore area for about 25 years, recently representing Iselin-Jefferson Company, Lane Cotton Mills, and Joseph W. Woods Company.

John McD. Moore, superintendent for 25 years of the Laurens Cotton Mills, and Mrs. Moore have closed their home at Laurens, S. C., and moved to Lexington, N. C., where Mr. Moore is one of the executives of the reorganized Dacotah Cotton Mills which he and associates recently purchased.

Wm. C. Appleton, the new president of the Viscose Company, has spent his entire business career in the textile field, working as a learner in various New England mills in 1919 and 1920, following service in the Army after being graduated from Harvard in 1917. In 1921 he became assistant to the treasurer at Whitman Mills and two years later joined the Harding Tilton Company as a salesman in the cotton yarn department.

James M. Cathcart, Jr., on April 15th assumed his new duties as assistant superintendent of the Chiquola Manufacturing Company. Mr. Cathcart is the son of James M. Cathcart, Sr., of Anderson, S. C., general manager of the Anderson Cotton Mills. He was graduated from the Textile School of Clemson College, Clemson, S. C., and had been associated with the Anderson Cotton Mills since that time.

CLINTON STARCHES

FOR ALL TEXTILE PURPOSES

Manufactured by

Clinton Company

CLINTON, IOWA

QUALITY
SERVICE

Casablanclas Company Opens Charlotte Office

American headquarters for the Casablanclas Corporation, of Barcelona, Spain, Manchester, England, and Bombay, India, originators of long draft spinning, were established in Charlotte this week, with the opening of offices in the Johnston building. Through this office, the cotton spinners of the nation will in the future be contacted direct by the company, instead of through licensed manufacturers, which was the plan followed for several years.

Fernando Casablanclas, Jr., president of the American company and a director of the parent organization, has been in the South for the past two weeks, surveying conditions and prospects. Decision to establish headquarters in Charlotte was reached, said Mr. Casablanclas, because of his recognition of the leading position held by the South in the manufacture of cotton textiles, and this particular city's advantageous location in relation to the spinning mills.

The Casablanclas system, which was developed by Fernando Casablanclas' father 20 years ago, and has since undergone a process of constant improvement, is now sold all over the world and is regarded as one of the textile industry's most important developments. Headquarters of the company, originally in Barcelona, were moved to Manchester, England, at the outbreak of the Spanish revolution.

In line with the company's policy to proceed cautiously but steadily, all parts comprising the system will be imported for the present from the English branch, Mr. Casablanclas explained, but gradually, the company will begin to manufacture parts in this country.

The Charlotte office will be in charge of both F. Casablanclas and his brother, J. Casablanclas. The latter will arrive here in the near future.



Fernando Casablanclas, Jr.

Record Spindle Hours

Washington.—The Census Bureau reported that the cotton spinning industry operated at 148.3 per cent capacity during March, as compared with 144.8 per cent during February this year and 108.1 per cent during March last year.

Spinning spindles in place March 31st totalled 27,024,970, of which 24,638,578 were active at some time during the month, compared with 27,103,076 and 24,536,254 for February this year and 28,840,856 and 23,175,502 for March last year.

Active spindle hours for March totalled 9,698,368,366 or an average of 359 hours per spindle in place, compared with 8,586,958,938 and 315 for February this year, and 7,263,926,919 and 252 for March last year.

Spinning spindles in place March 31st in cotton-growing States totalled 18,908,012 of which 17,760,552 were active at some time during the month, compared with

18,952,236 and 17,760,252 for February this year, and 19,187,904 and 17,053,028 for March last year.

Active spindle hours in cotton-growing States for March totalled 7,323,292,352 or an average of 387 hours per spindle in place, compared with 6,374,864,652 and 336 for February this year, and 5,686,324,284 and 296 for March last year.

Active spindle hours and the average per spindle in place for March in cotton-growing States were:

Alabama, 737,388,342 and 390; Georgia, 1,296,332,719 and 392; Mississippi, 74,893,088 and 363; North Carolina, 2,195,528,029 and 363; South Carolina, 2,391,341,525 and 423; Tennessee, 2,257,117,490 and 399; Texas, 91,365,550 and 358; Virginia, 218,576,542 and 335.

Diastafor Moves

Sydney W. Fiske, manager of the Diastafor Department of Standard Brands, Inc., has announced that the department has moved from its former location at 595 Madison Avenue, New York City, to larger quarters at 691 Washington Street, New York. The ground floor of the building has been taken over by his department.



Sydney W. Fiske

Howard L. Jenkins, who has called on the mills for the Diastafor Department for more than 15 years, is also making his headquarters at the new address. The trade is cordially invited to stop in and see the new offices at any time.

Fleischmann's Diastafor is said to be nationally known as a leader in its field. Warehouses are located at strategic points to make quick service possible at a low cost.

These points are New York, Philadelphia, Charlotte, Boston, Cincinnati, and Pekin, Ill.

The famous Fleischmann Laboratories in New York City, a million-dollar institution, is at the disposal of Mr. Fiske and his staff, to help solve the problem he meets.

The Diastafor Department was 29 years old on March 1st. Mr. Fiske has been a member of it from the beginning.

Coming Textile Events

May 14-15

National Rayon Technical Conference, at Washington, D. C.

MAY 31 - June 5

National Cotton Week. Seventh Annual Observance.

JUNE 3-4

Cotton Manufacturers Association of Georgia 37th annual meeting, at the Cloister Hotel, Sea Island, Ga.

JUNE 10

Southern Textile Association Associate Members Banquet at Ocean Forest Hotel, Myrtle Beach, S. C., at 8:00 P. M.

June 11-12

Southern Textile Association annual meeting, at Ocean Forest Hotel, Myrtle Beach, S. C.

Power Discussed At Master Mechanics' Meeting

(Continued from Page 13)

jack of all trades. I am not an authority on either subject, but I know something about them and about building construction, and so forth. If there are any questions you want to ask me I will try to answer them, but I have not had much occasion to know much about your problem, by reason of your already successful efforts.

If there is nothing more, I want to express our gratitude that you have come to Charlotte and the hope that your stay will be enjoyable. I should like to invite you down to the headquarters of the fire department, to look at one of the oldest fire engines we have in America and also other things of interest we have there. Perhaps we could get together and figure out something that would be really constructive.

Chairman: We thank you, Mr. Griswold, and we are very glad to have you with us today.

Are there any questions that anyone wants to ask Mr. Griswold?

Mr. A.: What means do you use for putting out fires, besides water?

Mr. Griswold: There is nothing quite so satisfactory for putting out fires as water, except oil fires and gasoline fires and paraffin fires. And alcohol is even harder to handle.

Mr. A.: I am thinking particularly about cotton. What has been used?

Mr. Griswold: In Charlotte we use no means other than water, and I have received no bulletins on any progress having been made with any other extinguishing agent. The National Board of Fire Underwriters, through its bulletins, usually keeps the fire departments informed when material progress has been made.

Mr. A.: Are there any chemical solutions that can be used?

Mr. Griswold: No, there has been no material progress made. You see, the National Board of Fire Underwriters provides the fire departments throughout the country with bulletins on practically everything that makes any material advance as a fire-extinguishing agent. We have received no such information. We use carbon dioxide—CO₂—for electrical fires, and also use carbon tetrachloride, and use a foam for oil fires; but for cotton I know of nothing that has replaced the use of water. It is unnecessary for me to tell you that, once a spark of fire gets into a bale of cotton, there is not much that will penetrate that cotton, and it is necessary to go in there and wash the fire out. We had an epidemic of fires in cotton warehouses in 1934. When such a fire occurs, after we put the fire out we take those bales of cotton, separate them, lay them out in rows in an open field, each bale to itself, and stretch hose lines around them. We watch those bales continuously, and as the fires show up we try to extinguish them. All the flash fires can be put out from the outside. Water is the only agency that we have used for putting out fires in cotton.

Mr. B.: How do you get at fires where you have a big room all filled with smoke? We had a waste room that caught fire, and the fire got back under the mill. When we discovered it, it was so full of smoke that we could not get to the fire and did not know what to do.

Mr. Griswold: In such conditions only one of two things is possible. If the heat has not reached the degree that you can not get in, you can get in through the use of smoke helmets. But the methods generally used is that

of ventilation. Of course, I have on very few occasions tried to break through the walls of a textile plant; though I have on one or two occasions, in the high-value districts, chopped through the floors. We have a hose that has a head with numerous small outlets. We try to get it directly over the fire, through a hole just small enough to drop it down.

Mr. B.: Isn't it a fact that when there is smoke in a building you can get right down on the floor or on the ground and there is a place there where you have fairly fresh air?

Mr. Griswold: It depends more or less on the heat. Firemen use more or less the diving habit—run in as close as you can, stay as long as you can, and then get out. A man who is a good diver can get in pretty far. If you are on the same floor with the fire, the fire is dragging all the fresh air and oxygen along the floor to the blaze. Then, depending on the size of the fire, and provided the heat is not too intense, you can stay there with more or less comfort until you put out the fire. Then you have to follow your hose lines back out. But where the smoke is so dense it is sometimes very dangerous. Carbon monoxide is one danger; you can lose your life by inhaling too much of it. There is another danger where the heat is so intense; at 1100 degrees F. it will explode. You have probably seen fire departments in operation in down-town districts and have seen firemen place ladders up and smash all the windows in the burning building. The reason they do that is that the heat is so intense that they can no longer stay in the building. When it reaches that point, the building is gone. Then they smash the windows to let the heat out, so they can go in.

About your cotton warehouses, some of them are too large for the sprinklers. Should a fire occur in one of these, the heat lets off too many of the sprinkler heads at one time, and the water pressure is reduced too much. In a large warehouse you can have a baffle wall built in the middle, so that the heat will not spread so fast and let off all the sprinkler heads at one time. I have sometimes seen the sprinkler system not work effectively because the heat set on so many of them at once. If you can restrict the area, it will help.

A Member: Are gas masks of value?

Mr. Griswold: I have always been skeptical about them. In some cases, like fumes of ammonia, you have to use them. But the trouble is to see through them; they cloud up. Where it is very bad and man goes in, we sometimes tie ropes to him.

Now, there is an air-lined mask with a hose attached through which you can pump air in. That costs around \$350. It is very effective where the smoke is dense but the heat has not reached the point where you can not stand it from a physical standpoint.

Chairman: We thank you, Mr. Griswold, and we appreciate your coming down here today.

Mr. Abernathy brought these welded parts up here this morning. He made his welder from stuff he picked up around his plant. I wonder if you have any questions you want to ask about it. Mr. Abernathy, will you tell us something about that welder?

Mr. Abernathy: First of all, my brother is the one that brought these specimens here, save this brass piece. There were two welders made, and each of us has one. They are practically the same. Just what would you like to know about them?

Mr. Vaughan: How big a weld can you make?

Mr. Abernathy: Well, we have never burned it up yet

trying to see, but about 2-7/16 inches to possibly three inches. This is a thoroughly home-made affair. I might say this for your benefit; it is nothing in the world but a low-voltage transformer with secondary lead. Whatever you want to weld is jabbed up against it; when it gets to welding heat you take the current off and put the ends together. That is all there is to it. A piece of steel can be welded in possibly five to ten seconds. There is no end to what can be done with a butt weld. We can not only butt weld but can cut metal in two, can forge a copper drop wire, can put a head on it, can take a piece of inch rod and throw up a ball of any size (possibly two or three inches in diameter) on the end of it. We can do all sorts of spot welding with it. My brother can possibly tell you more about the different kinds of work you can do on it than I can. If you have a motor shaft with a bad end, you can cut that off and put a new one on. If you have a shaft and need a longer one, you can cut the shaft in the middle and put in a piece and extend it. There are lots of things you can do with it. I do not know of anything we have put in in the Cliffside Mills that has given us more profit. Mr. Vaughan has seen our outfit, and Mr. Phillips has seen it. Quite a few of you have, I think. If you have not, I think it would be worth your time to go and see one of them and investigate it.

If there are any questions you want to ask us personally, either one of us will be glad to tell you what we can. I know that your time in this meeting is valuable, and I shall not take up any more of it.

B. W. Thompson, Master Mechanic, Wiscasset Mills Co., Albemarle, N. C.: At the present time we are doing quite a bit of fabricating in stainless steel, and I should like to hear from Mr. Abernathy just how it can be adapted to that. We feel that we are doing a very nice job, and I should like to hear from anybody doing that kind of work.

Mr. Abernathy: I shall be glad to talk with you about that afterwards.

Chairman: I believe it would be interesting to the men here to hear about that kind of work.

Mr. Thompson: I should like to hear from anyone here who is doing anything of that kind.

Chairman: Is there anyone here who is doing any welding of stainless steel? Mr. Abernathy, it seems that you are the only one. Can you tell us anything about it?

Mr. Abernathy: I want to say that you can weld anything but cast iron with this. Take sheet metal; up to about three-eighths of an inch is the biggest we can spot weld. This is not a spot welder, but with just a few gadgets you can do as good spot welding as with anything.

Chairman: Is this welder A. C. or D. C.?

Mr. Abernathy: It is A. C.

Chairman: We will go on with our questions. Let's take up No. 27 next: *"Who should decide whether broken or worn machinery parts are to be repaired or discarded?"* What do you think about that, Mr. Edmiston?

Mr. Edmiston: Well, at our place the broken parts are brought into the supply room, and they save them for us. We send our mechanic and shop foreman out to look them over, and all those parts that we think we can repair are brought into the shop and we repair them. I think they often save parts there that, if we did not do that, would be thrown in the junk pile.

Chairman: Does the overseer of each department look at them before they are brought to you?

Mr. Edmiston: No.

Chairman: They are just brought right to the shop?

Mr. Edmiston: They are brought to the supply room—that is, those parts that the fixers think they can not fix. Of course, a lot of the parts are brought direct to the shop—parts that the fixers know can be repaired.

Mr. Nichols: If I understand that, it is the master mechanic who decides whether those parts can be repaired?

Mr. Edmiston: That is so at our place.

Mr. Nichols: That is so at your place, but do you think that is the way it should be?

Mr. Edmiston: Yes, sir.

Chairman: Mr. Queen, what do you think about it?

Mr. Queen: We have a rule up there that the overseer must see the part before it leaves the room. In other words, he has to issue a shop repair order for it to be fixed. The overseer has a chance to see those parts. If he thinks a part can not be repaired, he writes out an order for a new part. If he thinks it can be, it is sent to the repair room. But before any parts are discarded they are sent to the supply room, where the master mechanic looks at them, and if he thinks a part can be repaired, he takes it up with the superintendent.

Chairman: Do you think that is a good system?

Mr. Queen: Yes, sir.

Chairman: The next question we will take up is No. 37: *"What is the best method of taking care of small hand tools such as electric drills, grinders, air or electric hammers, or any others, so you can find them at any time and they still can be of service to anyone who has a right to use them?"*

Mr. Kincaid, what do you think about it?

Mr. Kincaid: You are singling out the wrong fellow. Frankly, I think a tool room is the best method for keeping tools. If you are going to allow an apprentice or an inexperienced person come in the machine shop, if you have not personnel enough to care for repairs, I think you ought to have a bunch of old drills that you have discarded (or at least that you do not think a lot of), that are practically worn out, for them to use, because they do not know the speeds of drills. That is my personal opinion of it. I think tools of any value should be locked up—cutters, arbors, etc., and files, because we have had many of them broken by folks because they could get to them, when probably they should not have. In most of the smaller shops they do occasionally allow second hands and fixers to go in and fit parts. That is my personal opinion of how to care for them in the small shops, where they work about four or five or six men.

Mr. C.: I think Mr. Edmiston could give some information on that.

Mr. Edmiston: In our place we have to keep our tools locked up, or we don't have any. Each shop foreman keeps the tools locked up in a locker and carries the key to that and lets the mechanic have it when he needs it.

Chairman: If you have a small hole to drill, or something like that, do you let the section man have the drill to do it with, or do you send a man to drill that hole for him?

Mr. Edmiston: Well, it depends on the man. Some-

(Continued on Page 32)

TEXTILE BULLETIN

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

The Joker

WITH every deck of playing cards there comes a joker.

Frequently the joker is thrown away but sometimes it is kept for use in trick games or for those which are not played "according to Hoyle."

When the C. I. O. textile union began to accept members without requiring either initiation fees or dues, many realized that a new kind of game was being played.

They were, according to report, paying \$100 per week, to a lot of printers, who were supervising the organization work and it was, of course, known that they expected to get their money back, in some way, with considerable profits, but their plan could not be discerned.

It now appears that they expect to secure permanent weekly remuneration through the use of a joker which has been quietly laid away but which will be inserted in the deck at the proper time and the joker is labeled "the check-off."

When more than 50 per cent of the employees of a mill have signed the C. I. O. cards, without obligation for dues, the mill will be required to enter into collective bargaining agreements with representatives of their choosing who will be the C. I. O. organizers.

As a part of those negotiations the C. I. O. representatives will demand the "check-off," which will mean that the mill must take the union dues out of the operatives pay envelope

each week and deliver same to the C. I. O. and they expect Miss Perkins and other Government agencies to assist them in securing the check-off.

With the mill obligated to take union dues from pay envelopes and with the employees obligated to permit same by reason of the membership cards they have already signed, the C. I. O. will be sitting pretty and will have established a permanent feed bag.

In slavery days the worst thing that could happen to a slave was to be "sold down the river."

The "check-off" is the joker through which the cotton mill employees of the South are to be "sold down the river" and become the permanent vasals of those who control the finances of the C. I. O.

If any mill operative doubts our statement, we challenge him to ask one of the district organizers of the C. I. O. to state in writing that no effort will be made to collect union dues through the check-off, that is, by forcing the mills to deduct the dues from the pay envelopes and forcing the employees to accept such deductions.

Belonged to the Textile Bulletin

THE following conversation, between two employees in a Georgia cotton mill, was overheard and mailed to us:

First Employee—"Hey, Bill, ever consider joining the C. I. O.?"

Second Employee—"Hell, no; I belong to the Textile Bulletin."

What Bill meant was that his ideas on textile unions agreed with those expressed by the Textile Bulletin.

Very few mill operatives are on our subscription list but a surprisingly large number get the copies which go to the overseers and second hands and read the Textile Bulletin every week.

The mill operatives know, or at least a large per cent of them believe, that the Textile Bulletin is sincerely interested in their welfare and that it would advocate labor unions if it thought that they were necessary or would benefit the employees.

Many operatives have been heard to say that the Textile Bulletin had done more to sustain wages and to prevent low wages during periods of depression than all the professional labor union organizers who have ever come South.

The real movement for better houses and better living and working conditions in Southern cotton mills began years ago when the Textile Bulletin exposed the disreputable mill houses in a prominent mill by taking photographs of them and publishing the pictures with the name of the mill.

That mill never forgave us but they immediately spent \$20,000 on their mill village and we aroused a public sentiment which forced others to make improvements.

There are some who do not agree with us in our opposition to labor unions in cotton mills but we watched unions wreck the textile industry of New England and force more than 100,000 former mill workers to seek employment in other lines and we have fought for what we thought were the best interests of the workers.

We appreciate the confidence expressed by the Georgia mill worker when he said "I belong to the Textile Bulletin."

Sitting Down On The Government

RECENTLY, within a period of a week, the New York City WPA witnessed two sit-down strikes and refused to compromise with the strikers.

In both cases the police were called in to remove strikers who were occupying WPA property against the orders of officials of the bureau. In both cases those who refused to leave the property after the police were called were arrested and booked on charges of disorderly conduct.

We make bold to ask if it is disorderly conduct to occupy the property of the WPA against the orders of the officials, why is it not disorderly conduct to occupy the factory of a private manufacturer against the wishes of its owner? If one action is wrong, it seems reasonable to assume that the other is equally wrong. If the police are called on in one case, it is hard to see and justify attempts to interfere with calling on them in the other.

Miss Perkins did not publicly protest the actions of the WPA authorities in New York, though it would seem that she ought to be just as doubtful of the illegality of WPA sit-down strikes as she was of the illegality of similar strikes in industrial plants.

In Other Countries

FROM Chungking, China, there recently came the following newspaper dispatch:

Hundreds of persons are dying of starvation daily in Chungking and its suburbs, as the worst drought in a quarter century held most of Szechuan, China's most populous province, in its grip.

Near-famine conditions prevailed in wide areas of this province of 55,000,000 inhabitants, and relief efforts thus far were almost helpless to cope with the disaster.

From Tignit in North Africa came a newspaper dispatch on April 3rd which said:

Tens of thousands of once-fierce Touareg tribesmen, the "Blue Men of the Sahara," are starving to death.

Thousands are fighting feebly against the death that faces them—disputing with emaciated donkeys for the whitish green herbs that grow beside desert roads.

The more fortunate receive about 2½ cents a day from Moslem charities. Others subsist on garbage. Some have been seen searching the refuse of French foreign legion stables in hope of finding a few unconsumed grains of feed.

The well paid automobile and steel workers who have recently engaged in sit-down strikes at the command of professional labor leaders could well spend some time reading about the standards of living in other sections of the world.

The Stretch-Out in Russia

FROM an article written by a Russian for a special Russian section of the *New York Journal of Commerce* we quote the following:

Zatraskina, a woman weaver at the October Revolution textile plant in the province of Moscow, has won fame as the initiator of the Stakhanov movement of labor efficiency in the textile industry. She is a loom tender and tends 216 Northrop looms which produced 3,010 meters of cloth in seven hours. Her looms were set at a speed of 200 strokes per minute, their efficiency coefficient being 0.95 while breakage was reduced to 0.1 case per meter of cloth. (A meter is 39.37 inches.)

We judge from the above that the stretch-out system is not unknown in Russia.

A Correction

EARLY in January we stated in an editorial relative to a prospective address of the communist Earl Browder at the University of North Carolina that at the meeting devoted to the consideration of his appearance, Dean D. D. Carroll of the School of Business made a talk during which he advised against allowing Browder to appear until after the Legislature adjourned.

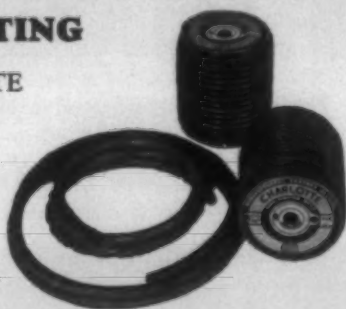
A young man who was at the meeting asserts that Dean Carroll did make that suggestion but Mr. Carroll denies same and not wishing to do him any injustice we publish this correction.

We are not in any way retracting our observation to the effect that Dean Carroll seems to have the faculty of always being present at meetings sponsored by the radical group of professors at the University of North Carolina and while we may be in error, we do regard him as being, at least, in sympathy with their activities and objectives.

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Mill News Items

TROY, N. C.—The Capelsie Cotton Mills plant here has been put into operation after being idle for four years. About 100 workers are employed.

MARTINSVILLE, VA.—Fontane Converting Works, Inc., formerly Powhatan Converting Works, Inc., has begun the installation of additional machinery.

BRISTOL, VA.—Measuring 252 by 205 feet, construction work has begun here on the one-story brick and steel rayon weaving mill for Burlington Mills, Inc.

DALTON, GA.—The Blue Ridge Spread Company is adding chenille bedspreads, S. B. Hurowitz makes known.

Machines have been installed, and samples already made up, he reports.

HILLSBORO, N. C.—All machinery is being overhauled at the Eno Cotton Mills here. The concern manufactures combed broadcloths and has 29,680 spindles and 1,006 looms.

CHARLOTTESVILLE, VA.—Ground has been broken for an addition which will enable the Albemarle Weaving Company to double the capacity of its plant. The concern manufactures upholstery and drapery fabrics.

CHARLOTTE, N. C.—The board of tax appeals at Washington, D. C., has determined the Johnston Mills Company, of this city, was not deficient in 1933 income taxes. The Bureau of Internal Revenue had assessed the company \$7,134.

KEYSER, W. VA.—Inspection has been made of the local woolen mill by representatives of the Botany Worsted Company of New York, preliminary to reopening of the long idle plant. Inspection was made by R. S. Bartlett and A. Ashworth of New York.

YORK, S. C.—In a sale marked by lively bidding, cotton mill stock in the hands of E. B. Lowry, receiver of the Loan and Savings Bank here, was sold for \$16,200. The sales were made on the authority of a court order and were confirmed by Judge C. J. Ramage.

EATONTON, GA.—After being closed for approximately ten years, Eatonton Cotton Mills are being renovated. While there has been no official announcement concerning the use of the plant, a current report indicates the possibility that a silk mill may start operations.

RICHMOND, VA.—The Norfolk & Western Railway has begun construction of a system of trackage near Front Royal, Va., for the plant which the Viscose Company is to erect in the suburbs. Ground is already being broken for the foundations of the various units. The first and main building of the group will be approximately 2,200 feet in length.

Mill News Items

ELLENBORO, N. C.—The recently formed Queen Anne Mills, capitalized at \$100,000, will be headed by W. E. Mason of Greenville and R. C. McCall of Liberty. This mill was formerly the Ellenboro Manufacturing Company. The plant will be improved and placed in operation at an early date.

GREENWOOD, S. C.—Ground has been broken for a large addition to the Mathews Mill at Greenwood, but officials there are silent as to their exact plans. The addition, it is unofficially reported from Greenwood, will cover almost as much ground as the present mill, although it is not known whether it will be as high. J. C. Self is head of the Mathews Mill.

cotton, wool and down quilts, have completed installation of machinery in their new plant and will begin operation soon. This is the first company of this kind to establish a factory here. Its payroll is expected to exceed \$20,000 annually. The plant will begin with 30 skilled operators. It has been announced that C. C. Belcher, production superintendent for Marshall Field & Co., will be in charge of the new concern.

ELK MOUNTAIN, N. C.—At the local unit of the French Broad Cotton Mills, work has been under way on a renovation program, and the installation of new machinery, which was moved here from a dismantled unit of this company in New York State. Plans were recently announced for the resumption of operations at this unit as soon as the equipment could be moved here from the Northern unit.

SPRING CITY, TENN.—Work has been about completed at the Southern Silk Mill, where a series of expansion programs have been under way. Included in this program were the construction of two fireproof buildings. One building is used to house a large 250-horsepower steam boiler, a hot water system to heat water for the dyeing department and a dynamo, and the other building is for storing fuel supplies.

GREENVILLE, S. C.—President T. M. Marchant of the Victor-Monaghan Company has announced that repair and repainting operations are underway to affect 1,200 company houses and five plants. The cost was not revealed.

Houses of the plants at Monaghan, Greer, Victor, Walhalla and Apalache are being repainted inside and out and repaired where necessary. Roofs of all houses already have been placed in first-class condition. The interiors of the five mills are being repainted.

"The program is being carried out to improve the living quarters of the employees and to provide them with as cheery, comfortable homes as possible," Mr. Marchant said.

The company employs approximately 3,000 persons, and was one of those recently granting wage increases.

FOR MILL WALLS

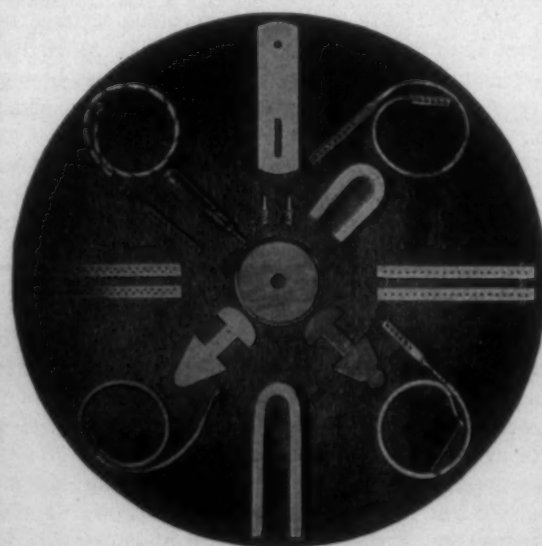
SHERWIN-WILLIAMS



SAVE-LITE

THE PLANT CONDITIONING PAINT

Rice Dobby Chain Co.



Millbury, Massachusetts

Mill News Items

FIELDALE, VA.—At the full-fashioned hosiery mill, Marshall Field & Co. has work well under way on an addition. It will be one-story, of brick, and will provide 30,000 square feet of floor space to take care of a dyeing and finishing department.

An official said the building would represent an expenditure of approximately \$30,000. One hundred and twenty-five workers will be added when the addition is complete.

LEXINGTON, S. C.—The auditor of Lexington County announces that the assessment and equalization of cotton mills and other textile industries by the South Carolina Tax Commission for the year 1936 in Lexington County totals \$305,000. The individual assessments are as follows:

Columbia Mills, New Brookland, \$75,000 in Lexington County, \$263,000 in Richland County.

Lexington Mill (Marter plant), Lexington, \$45,000.

Middleburg Mill (Martel plant), Batesburg, \$75,000.

Red Bank Mill (Marter plant), Lexington, \$110,000.

FRONT ROYAL, VA.—Nitro-cellulose process rayon workers, many of whom formerly were employed by the Tubize Chatillon Corporation at Hopewell, are now being sent to the company's plant in Pao Paulo, Brazil, where the plant was re-erected after labor trouble caused it to shut down in Hopewell in 1934. Officials of the company in Hopewell said it is nothing new, and that experienced workers are being sent to the South American plant as rapidly as they are needed there. Most of those going at present will work in a supervisory capacity.

GREENVILLE, TENN.—Nathan Natelson, secretary and treasurer of the Barnard Hosiery Company, 350 Broadway, New York, has purchased controlling interest and assumed the direction of the Ricks Hosiery Mills, Inc., of Greenville, manufacturers of men's seamless hosiery. He purchased the entire outstanding issued common stock.

J. H. Rader of Greenville is secretary, treasurer and manager of the plant and Nathan Natelson has been elected president. The mill at the present time is running to capacity and expects to expand its operations.

LYNCHBURG, VA.—At least one, and probably two, more hearings are to be held in New York before Special Master Peter B. Olney, Jr., before he will be able to recommend to the court which of four reorganization plans proposed for the Consolidated Textile Corporation, of 88 Worth street, should be accepted.

The special master points out that he has not yet heard sufficient testimony to be clear in his own mind as to whether one of the plans, which contemplates a considerable investment of new capital to rehabilitate the machinery, should be approved, or whether the alternate plans, which contemplate a loan of \$350,000 and a minimum of machinery, should be favored.

Powell in Temporary Charge of Charlotte Office of H. & B.

Since the death of Walter Rimmer, Southern manager of the Charlotte office of the H. & B. American Machine Co., Clinton M. Powell, who recently joined the Southern sales force of this company, is temporarily looking after the Charlotte office, until a new manager can be sent South to take charge, which will be about June 1st.

OBITUARY

JOHN T. McNEILL

John T. McNeill, 66, of Red Springs, N. C., died in a Charlotte hospital. Mr. McNeill was secretary-treasurer of the Liberty Manufacturing Company, Red Springs. Survivors are his widow and son.

WM. B. ILER

William B. Iler, aged 74, died at his home in Asheville, N. C., May 3rd, and was buried in Springwood Cemetery in Greenville, S. C., beside his wife, May 5th, with Masonic honors.

Mr. Iler was a former mill superintendent, having served in this capacity with Greenwood Cotton Mills, Greenwood, S. C., Harmony Grove Cotton Mills, Commerce, Ga., and Capps Cotton Mills, Toccoa, Ga., but for the past 28 years he had represented Wm. M. Bird Co., Charleston, S. C., in the States of South Carolina and Georgia. Mr. Iler was the eldest son of James F. Iler, who started up the first unit of Piedmont Manufacturing Company, Piedmont, S. C., and who served as superintendent of that company for more than 20 years.

W. B. Iler is the sixth of his father's sons to pass away, H. H. Iler, plant engineer of Union Bleachery, Greenville, S. C., being the sole survivor of the original seven brothers who followed their father into the textile industry and who emulated his example by making that their life's work.

THOMAS TAYLOR LUCAS

Thomas Taylor Lucas, 33, died at the home of his parents, Mr. and Mrs. T. T. Lucas, in Charlotte recently. Mr. Lucas, a textile engineer, had held several responsible positions in North Carolina, New York and Canada. Survivors are his wife, his parents, and three brothers, Chas. D. Lucas, of High Point, N. C., B. Simons Lucas and Thomas E. Lucas, of Charlotte, N. C.

HOMER J. FORSYTHE

On April 29th, Homer J. Forsythe, general manager of the Hyatt Bearings Division, General Motors Corporation, Harrison, N. J., died after an emergency operation while on a visit to Pinehurst, N. C., with his wife and daughter. Mr. Forsythe was in his 53rd year. He was born in Wilmington, Del., November 15, 1883. His home was in Montclair, N. J.

T. H. Burkhardt Joins Cleveland Cloth Mills

It was announced by J. W. Gardner, general manager of Cleveland Cloth Mills, that T. H. Burkhardt has joined this organization in the capacity of vice-president in charge of manufacturing.



For the past seven years Mr. Burkhardt has been in charge of manufacturing with the Burlington Mills Corporation. Prior to that he has been connected with the Cleveland Cloth Mills, Inc., North American Rayon Company, American Bemberg, J. W. Cox & Co., and H. R. Hallison & Co.

Mr. Burkhardt has been identified with the rayon weaving industry since 1921 and by his records and experience is considered one of the outstanding men in this industry.

J. W. Sanders Will Filed

The will of J. W. Sanders, cotton mill operator of Jackson, Miss., who died April 3 in New York, was filed in Hinds County Chancery Court bequeathing an estate of \$1,500,000 estimated value to his wife and eight children.

Trustees and administrators are two sons, Benjamin D. Sanders, and Robert D. Sanders, both of Jackson, and a son-in-law, E. E. Morgan.

Mr. Sanders left approximately \$42,000 in life insurance to Mrs. Sanders to be paid to her at the rate of \$225 monthly.

An unspecified amount of bonds and cash in addition to the 10 cotton mills were listed in the will.

The following children participated in the bequest:

James C. Sanders, of New York, Bennie L. Sanders, Robert D. Sanders, and Miss Stella Sanders, Jackson; Mrs. Helen Chandler, Meridian; Mrs. Clara S. Morgan, Jackson; Mrs. Julia Dumler, St. Louis, and Miss Nell Sanders.

SANDS SPRINGS, OKLA.—The \$369,000 suit growing out of textile labor troubles at Commander Mills, Inc., in Sand Springs, about two years ago, was quashed in the District Court here by Judge Harry Halley.

Local Union, 1840, of Textile Workers had sued the mill for \$369,000 as salary for 385 employees.

The union alleged that, when the mills shut down at the time of the Sand Springs textile strike, an agreement was made under which only union workers were to be employed. The petition alleged that many of the workers were not re-employed and that others hired were later discharged. Judge Halley held that while the agreement provided for the employment of union labor, there was no provision forbidding the mill management also to discharge employees.

Method of Weaving Cut Pile Fabric

A patent on a method of weaving cut pile fabric has been granted by the United States Patent Office to James A. Fligg, Elkins Park, Pa., on application made February 24, 1933. The patent is No. 2,075,187, and is described in the official gazette as follows:

"The method of weaving a weft cut pile fabric which consists in shedding warps to form upper and lower sheds upon opposite sides of stationary guides which extend in a direction parallel to the warps, and which carry knives, simultaneously shooting a pile weft through the upper shed and a base weft through the lower shed, with the pile weft floating over the guides and certain of the warps, shedding the warps to weave in the base weft, and at the same time tying in the pile weft at differently spaced intervals, said shedding again forming upper and lower sheds upon opposite sides of the said guides, simultaneously shooting the pile weft and the base weft through the upper and lower sheds respectively, then shedding the warps to weave in the base weft and tie in the pile weft along warps which are adjacent to the tying in warps which tie in the pile weft on the first mentioned shot, repeating the above noted shedding and shooting operations to tie in the pile wefts of alternate shots along the same warps, in one longitudinal zone the points of tying of alternate pile wefts being within the points of tying of intermediate pile wefts, and in the next adjacent longitudinal zone the points of tying of the intermediate pile wefts being within the points of tying of the alternate pile wefts."

Burlington Mills Pay First Common Dividend

Burlington Mills Corporation has declared an initial quarterly dividend of 25c on the common stock, payable May 15th to stockholders of record May 5th.

The corporation reports net income before surtax on undistributed profits of \$494,365 for the first 1937 quarter, equivalent to approximately 90c per common share. This compares with net income of \$201,379, or 37c a common share for the predecessor constituent companies and subsidiaries for the first quarter of 1936.

Per share earnings in both instances are computed on the basis of 549,070 shares of common stock outstanding at the present time.

BURLINGTON, N. C.—The Baker-Cammack Textile Corporation was reorganized, effective May 1st, and is now the Baker-Cammack Hosiery Mills, Inc., according to a statement released by J. E. Baker, president.

The new organization purchased the entire assets and assumed the liabilities of the former corporation, it was stated. The business has an authorized capital of \$600,000.

"This change will in no way affect the associate concern, Baker-Mebane Hosiery Mills, at Mebane," Baker said, "which will continue operations as a subsidiary, and neither will there be any change in the operating policy nor in the personnel of the concern."

Attendance At Master Mechanics' Meeting

Among those present at the Spring Meeting of the Master Mechanics' Division of the Southern Textile Association were the following:

- Abernathy, A. D., M. M., Alexander Mfg. Co., Forest City, N. C.
 Abernathy, V. M., Elec. Engr. and Asst. Shop Foreman, Cliffside Mills, Cliffside, N. C.
 Ashmore, Wm. G., Southern Editor, *Textile World*, Greenville, S. C.
 Ballard, O. L., Boiler Room Engineering, all mills, Columbia, S. C.
 Berg, S. D., Sales Engr., Fafnir Bearing Co., Charlotte, N. C.
 Bivens, J. P., Electrical Engineer, Gastonia, N. C.
 Brown, C. B., Asst. Engineer, Duke Power Co., Charlotte, N. C.
 Carr, J. W., Chief Electrician, Consolidated Textile Corp., Lynchburg, Va.
 Cauthen, H. A., Shop Foreman, Firestone Cotton Mill, Gastonia, N. C.
 Clark, David, Editor, *Textile Bulletin*, Charlotte, N. C.
 Cook, J. H., M. M., Erwin Cotton Mills Co., No. 3, Cooleemee, N. C.
 Edmiston, E. E., M. M., Mooresville Cotton Mill, Mooresville, N. C.
 Fox, John H., Engineer, Duke Power Co., Charlotte, N. C.
 Gilmer, E. D., Draftsman, Southern Bleachery & Print Works, Inc., Taylors, S. C.
 Harris, C. E., Duke Power Co., Meter Dept., Charlotte, N. C.
 Hatley, P. D., M. M., Kendall Mills, Mollohon Plant, Newberry, S. C.
 Henson, W. G., M. M., Firestone Cotton Mill, Gastonia, N. C.
 Hunnicutt, H. R., M. M., Neisler Mills, Inc., Kings Mountain, N. C.
 Kincaid, L. M., M. M., The Kendall Co., Paw Creek, N. C.
 Knox, L. B., Master Machinist, Springs Cotton Mills, Eureka Plant, Chester, S. C.
 Lake, Marshall E., Power Sales Engr., Duke Power Co., Charlotte, N. C.
 Lewis, A. T., Chief Electrician, Erwin Cotton Mills Co., Cooleemee, N. C.
 Lindsey, V. B., M. M., Jackson Mill No. 3, High Shoals, N. C.
 Matthews, W. A., Operating Dept., Duke Power Co., Charlotte, N. C.
 McCanless, J. B., M. M., Arcade Mill, Rock Hill, S. C.
 Morrison, A. C., Supt. Meter Dept., Duke Power Co., Charlotte, N. C.
 Nichols, R. F., Plant Engr., Newberry Cotton Mills, Newberry, S. C.
 Pascal, Frank, M. M., Valdese Mfg. Co., Valdese, N. C.
 Pascal, Henry J., M. M., Pilot Full Fashioned Mills, Inc., Valdese, N. C.
 Pegram, T. C., Supt., Erwin Cotton Mills Co., No. 3, Cooleemee, N. C.
 Pence, W. N., M. M., Efrid Mfg. Co., Albemarle, N. C.
 Phillips, H. L., Salesman, Southern Electric Service Co., Charlotte, N. C.
 Powell, W. B., Draftsman, Firestone Cotton Mills, Gastonia, N. C.
 Pritchard, L. H., M. M., Pacific Mills, Columbia, S. C.
 Queen, B. G., M. M., Shelby Cotton Mill, Shelby, N. C.
 Queen, G. C., M. M., Pomona Mfg. Co., Greensboro, N. C.
 Robinson, P. G., M. M., Trenton Cotton Mills, Gastonia, N. C.
 Royal, B. Ellis, Associate Editor, *Textile Bulletin*, Charlotte, N. C.
 Smith, W. A., M. M., Spencer Mills, Spindale, N. C.
 Southard, J. H., M. M., Dover Mill, Shelby, N. C.
 Swing, W. H., M. M., Lexington Silk Mill, Lexington, N. C.
 Taylor, T. H., Electrician, Southern Bleachery & Print Works, Inc., Taylors, S. C.
 Thomason, F. L., Rep., N. Y. & N. J. Lubricant Co., Charlotte, N. C.
 Thomason, L. W., Rep., N. Y. & N. J. Lubricant Co., Charlotte, N. C.
 Thompson, B. W., M. M., Wiscasset Mills Co., Albemarle, N. C.
 Toms, J. P., C. E., Shelby Cotton Mills, Shelby, N. C.
 Vaughan, R. L., Sou. Elec. Serv. Co., Greenville, S. C.
 Watson, L. G., Acme Products Co., Charlotte, N. C.
 Williams, W. T., The Fairbanks Co., New York, and Charlotte, N. C.



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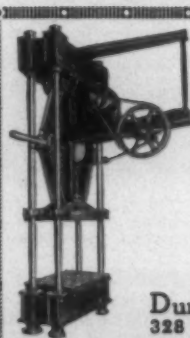
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PUBLIC SALE OF SILK MILL

BY VIRTUE OF THE POWER AND AUTHORITY vested in me, the undersigned J. A. Moores, as Trustee, by a certain trust deed dated the 1st day of April, 1934, and recorded in the Register's Office of Lincoln County, Tennessee, in Trust Deed Book 70, page 539, executed by the Fayetteville Silk Mills Company, I will attend ON THE PREMISES, in the old 8th Civil District of Lincoln County, Tennessee, in the town of Fayetteville, on THURSDAY, JUNE 17, 1937, and at about 11:00 o'clock A. M., and offer for sale and sell for cash, free from and in bar of the right or equity of redemption, the real estate, lot, building and parcel of land of the Fayetteville Silk Mills Company, and all of the machinery erected and installed therein, of every kind, including motors, belting, wiring, connections, shafting, attachments and findings, including 60 looms, and all other equipment, a part of said Silk Mill including office furniture, etc. Said real estate and machinery and equipment will be sold as a whole, and as one plant. This mill is in first class condition, and there is an abundance of trained local help, the mill is suitable for making either silk or rayon, and labor conditions are ideal.

This the 6th day of May, 1937.

J. A. MOORES, Trustee.

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Processing of Rayon Staple

(Continued from Page 4)

ever, the long draft system has been used successfully on coarse counts.

Spooling and Warping

Any type of spooling and warping satisfactory for cotton can be adjusted to use rayon staple satisfactorily.

Slashing

The cotton slasher is used on rayon staple principally because of the large volume of moisture to be dried out and the fact that this equipment is available in most mills. The slasher should be equipped with driven drums and temperature controls. The stretch should be held down as low as possible and should not go much over 1½ per cent.

The question as to what type of size to use depends largely on the type of finishing the cloth will get. Good weaving results can be obtained from both gelatin and starch base sizes.

Weaving

As to weaving of rayon staple, it should be considered from the standpoint of rayon rather than cotton. Rayon staple like denier yarn is subject to variation in humidity and tension, and for this reason the same precaution should be observed. If the loom is set up with this in mind, no trouble will be experienced in weaving rayon staple.

In processing rayon staple through the cotton equipment, no major changes are necessary. It has been found that rayon staple will stretch readily, therefore more care must be given to roll settings and twist factors than on cotton. Rayon staple requires a relative humidity condition close to 55 per cent on viscose process and close to 65 per cent on the acetate process, throughout the mill for best running. If one will keep in mind the principles employed in the carding and spinning of fine long staple cotton, the problem is very simple. With these simple rules in mind, the average mill will be able to make a satisfactory yarn from rayon staple.

Mill Assessments

York, S. C.—The auditor of York county makes known that the assessment and equalization of cotton mills and other textile industries by the South Carolina Tax Commission for the year 1936 in York county total \$3,021,125. The individual assessments are as follows:

Aragon-Baldwin Mill (Aragon) at Rock Hill, \$263,800; Arcade Mills at Rock Hill, \$184,000; Bowling Green Spinning Co. at Clover, \$30,000; Cannon Manufacturing Co. at York, \$125,000; J. H. Cutter and Co., at Rock Hill, \$100,000; Clover Mills at Clover, \$75,000; Springs Mill (Fort Mill Plant) at Fort Mill, \$583,400.

Hampton Spinning Co. at Clover, \$340,000; Highland Park Manufacturing Co. at Rock Hill, \$112,000; Industrial Cotton Mill at Rock Hill, \$300,000; Textiles Incorporated (Lockmore), at York, \$20,000; Neely Travora Mill at York, \$30,000; Victoria Cotton Mill No. 1, at Rock Hill, \$58,000; Victoria Cotton Mill No. 2, at Rock Hill, \$4,925; Textiles, Incorporated (Wymojo), at Rock Hill, \$60,000; Rock Hill Printing and Finishing Co., at Rock Hill, \$715,000; Jac Feinberg Hosiery Mill, of Rock Hill, \$20,000.



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Power Discussed At Master Mechanics' Meeting

(Continued from Page 21)

times we let them have it, but sometimes with others we do not get the tool back.

Chairman: Mr. Nichols, what system do you have?

Mr. Nichols: Mr. Chairman, I find that the least that we can let the fixer do in the shop, the better off we are. Personally, we would rather have the part returned to the shop and have the mechanic do what he wants done on the job. As the gentleman over here said, if he lets a drill go out, when he wants it he will probably have to go and get it, and very often it will be in bad shape. We have an order issued for the repair of parts, and that comes through the overseer. If we let them have a drill, it is charged to that department. As for anything that is to be repaired, we do it in the shop. If they have any drilling to do—any extensive drilling in the weave room or anything like that—we send a man to do it. We find that is better all the way around. Nine times out of ten, if it is a tap, another person will break the tap off.

Chairman: There are times when you let them have a drill to drill a tap, aren't there?

Mr. Nichols: Not many times. We try to keep the drill in the shop.

Chairman: Is there any more discussion on that?

Mr. Nichols: If you are going on to another question I should like to have No. 26 taken up.

Chairman: That is: "*Should the supply room be under the supervision and control of the mechanical department?*" What do you think about that, Mr. Edmiston?

Mr. Edmiston: I have just got rid of the supply room in my place. I had had charge of it for the last eight or ten years, and I just recently had it shifted to another department, and I am glad to get rid of it.

Chairman: You do not think it is a very good idea, then, for the mechanical department to have charge of it.

Mr. Edmiston: It did not suit me very well.

Chairman: What do you think about it, Mr. Queen?

Mr. Queen: I have a supply room, but I wish someone would take it away from me. I don't think the mechanic has any business with the supply room if he is going to run the machine shop.

Mr. Smith: I have worked under both systems, and I find that the master mechanic by all rights should have the supply room. To my way of thinking he can watch over the supplies; he knows what his stock is; he knows what the shop can make; he knows what the shop can not make; he knows what should be ordered and what should not be ordered. All parts repaired in the shop are brought back to the supply room, and the supply clerk issues those out on orders. I think the mechanic should have the supply room.

T. C. Pegram, Supt., Erwin Cotton Mills Co., No. 3, Cooleemee, N. C.: We have just rearranged our supply room. If anything is broken, the assistant overseer writes an order to the supply room, if he wants a new part. This order is filled without question by the supply clerk. If the order comes from the weave room, say, the next morning the master mechanic, with the head loom fixer, goes over the broken parts. They are put on a table at the back of the supply room when brought in. The master mechanic and head loom fixer at that time determine

whether the part is to be repaired or whether it should not be repaired. If it is repaired, the part is repainted and put back in stock and issued again upon order at the same price that the original piece is issued, because we think that our piece should carry the same price. We work a man in our supply room on each shift, and it is a question with us as to whether we are going to change that system or not. I should like to hear more discussion as to whom the supply rooms should be under. It is true that if it is under the master mechanic he can keep a better check on what can be repaired, but it is also true that in a big plant the master mechanic may not have time to exercise supervision over the supply room. Personally, I believe you should have a man who is competent; in other words, there should be one man in your supply room who is competent to know what to order, when to order, and the quantity to order. We have a card system; there is a card on every bin, and when those parts get down to a certain number we are supposed to order to replace them—to put a certain number back into that bin. In order to keep up with that you should have a very competent man in your supply room. I think that one of the weakest things around a cotton mill is the average supply room. More stuff gets out of it, and more stuff is ordered that should not be ordered, than is generally realized; and that is my reason for saying that one of your best men around the mill should be the supply clerk.

Chairman: Let's hear some discussion on that. What is wrong with having the supply room under the office manager?

Mr. Nichols: In answer to that I would say that the office manager would naturally have to depend upon the master mechanic to know what he was doing. He might know all about running the office, but when it comes down to knowing the parts necessary to have, I think that would be out of the question. It sizes itself up to me like this. You say the master mechanic does not have time to take charge of the supply room. The gentleman over here says the mill should have a good supply clerk and should have a card system. We find that generally when a salesman comes in and is passed through to the supply room the supply clerk will have to find the master mechanic to talk to him about what they are going to buy. I feel, myself, that it should be under the master mechanic. In other words, he is supposed to be the man with brains, the man that knows. He is going to repair for the other men. The other man does not know whether a part can be repaired or not; he does not know the cost of the repairs. We find that an overseer will send an order down—don't mean a requisition; I mean an order for something to be bought, perhaps gears or something of that kind; and sometimes those gears are bought from a manufacturer when they can be made in the shop cheaper than they can be bought. Who is to know whether they can be, or not, if it is not the master mechanic?

Mr. Pegram: I should like to make myself clear on that subject. I do not think the office manager has any right to fool with the supply room. If there is anything to be bought for the supply room, they can buy it at the office on requisition. I do not think a salesman has any business getting inside the supply room. I think the proper way to handle the buying of supplies is to let some designated person in the office, say, the office manager, buy supplies and to keep the salesman out of your supply room.

Mr. Nichols: I don't want the gentleman to think that I meant to turn the salesman loose in the supply

room. I think that would be the wrong thing to do.

Mr. Edmiston said he is glad he got rid of his supply room, but I think he will admit that they call on him for his knowledge of what is best to buy and what is best to use. Isn't that so? They have not forgotten you.

Mr. Edmiston: We promoted a man at our place from the supply room to purchasing agent. He was in the supply room quite a while and was familiar with the supplies. He is purchasing agent now and also has charge of the supply room. There are a lot of things he will take up with the mechanic—things he has some doubt about. We discuss it and get together on it and decide what to do.

Mr. Queen: My supply man has a list of all supplies that are made in the shop. If an overseer puts in a requisition for supplies, he looks at that list. If the part wanted is being made in the shop, he turns the requisition over to the shop; if not, he orders the part. My supply room man makes out the requisition, and I approve it and sign my name to it, before turning it over to the office.

Mr. Kincaid: The master mechanic may know practically everything that is in the supply room, but he does not know the quantity. This is an interesting subject. I made up my mind not to get on the floor any more, but I want to say it seems to me that we are taking the mechanic in on a proposition that he can not decide definitely. I am afraid we would be out of certain supplies. It seems to me it is too general. If we take it merely for the shop and the maintenance of the plant in general, that is all right. We know what we are supposed to have in the way of pipe fittings, etc. But if you have a supply room with ten or fifteen thousand dollars worth of supplies in there, how are you going to know what is needed?

Mr. Nichols: If you have a supply room that is kept up, that is operated on the card system, and have on that card the maximum and minimum number of parts, and you know about what you need for a year's supply, you can keep up with what is needed. The supply clerk carries for a certain demand, just as your grocer does. It is up to your overseer to give you notice in advance if he is going to overhaul seventy-five looms, for instance, so you can order or make the necessary parts. But you know just about how many shuttles you are going to use in a year, for instance, don't you?

Mr. Kincaid: No. I know the average life.

Mr. Nichols: Do you mean to tell me that the number of shuttles you use, year after year, does not run fairly constant, outside of overhauling? Wouldn't you say it does?

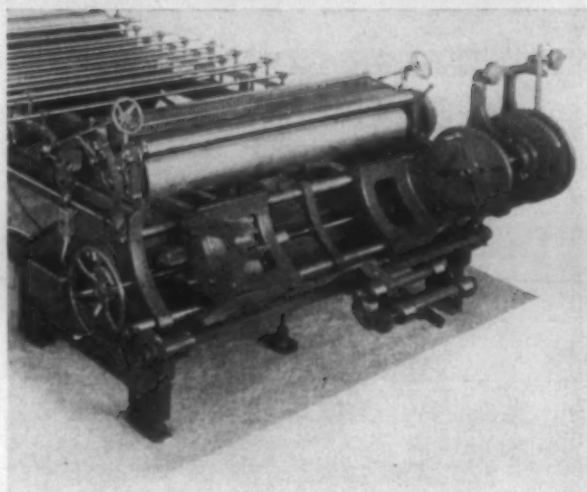
Mr. Kincaid: I would not say that, no, because you might change your lug strap from year to year, and the experience would be entirely different.

Mr. Nichols: I grant that, but you are not going to change to that without making a test on it, which would give you time to order or make parts.

Mr. C.: I think that depends greatly upon the amount of supplies in your supply room. We have a well equipped supply room and have one man that issues supplies—one man that does the ordering and checking in. It is quite a job if you have any size supply room. If you have seven hundred looms it is hard to know what you need, and I could not keep up with it. I would not know how many supplies a loom needs. Of course, if I want anything for the shop I send in a requisition and they order it. So far as the master mechanic's trying to keep up with the supplies for a large mill is concerned, I think

(Continued on Page 36)

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Domestic

Export

MERCHANDISING

Joshua L. Baily & Co.

10-12 Thomas St.

New York



Cotton Goods Markets

New York.—Trading in print cloths and other types of cotton gray goods was moderately active and prices showed little change.

Business was confined to popular print cloth constructions and few broadcloths with deliveries running through the third and fourth quarters. Sheetings, drills, osnaburg, ducks and other heavy goods were unchanged. Some of these goods were available in second hands at prices under mill levels. Fine yarn gray cloths were quiet and easier.

Finished cotton goods showed slight improvement. Shipments against old contracts on denims, wash goods, sheets, pillow cases, blankets and outing flannels were heavy but new business was small. Percales were somewhat more active.

Rayon yarns continued in active demand and producers began to allot production for the third quarter. Sales of unfinished rayon goods were larger. Silk pieces were lower. Cotton underwear mills were running at peak production against old orders but new orders were light.

Despite the current lull in fine goods markets and the pressure being exerted for lower prices in a number of directions observers profess to note the beginning of a real trading-up movement. One large house dealing almost exclusively in fine goods is reported to have established a special department for the sale of fine cottons and rayons in the gray above the 22c mark. If this venture is successful, a number plan to concentrate on the promotion of quality cloths and abandon some of the low-end cloths made to sell at a price. Mills are also experimenting more and more with distinctly fancy weaves in the belief that cloths of this type will soon be in demand by converters who are somewhat tired of the intense price competition on the more staple materials.

Mills are doing considerable experimentation with novelty yarns for spring in hopes of developing a rayon print cloth for spring which will prove a successor to the standard 92x68 pigment number.

Print cloths, 27-in., 64x60s	5 3/4
Print cloths, 28-in., 64x60s	6 1/8
Gray goods, 38 1/2-in., 64x60s	7 1/8
Gray goods, 39-in., 80x80s	9 1/4
Tickings, 8-ounce	18
Denims	16
Brown sheetings, standard	12
Brown sheetings, 4-yard, 56x60	9 1/2
Brown sheetings, 3-yard	11
Dress gingham	16
Staple gingham	12

J. P. STEVENS & CO. Inc.

Selling Agents

40 - 46 Leonard St., New York

Cotton Yarn Markets

Philadelphia, Pa.—Buyers continue actively seeking possession of yarn still due them on contracts, though they are in no hurry to place additional orders. Suppliers have been marking time, not forcing business by offering lower prices. Inquiries have continued to indicate that some of the larger sale yarn users intend within the next few weeks to protect their remaining yarn requirements for fall. Among the larger retailers, it is reported, those who kept themselves clear of excessive inventories believe that by the end of May they can profitably re-enter the markets and, in the aggregate, their buying would be substantial, giving impetus for covering with yarn in June, through to the end of this year, in certain cotton lines.

Despite the general impression among yarn buyers recently that prices then quoted were excessive, few have been able since then to cover all they sought at prices as low as they talked of then. During the present week, yarn rates have remained without general change. When asked for quotations on an assortment of numbers, some of the larger suppliers have responded by quoting previous top prices, giving customers the impression that these sources are still so well supplied with business that they are not interested in offers which imply the granting of concessions.

Where suppliers want to accommodate tardy applicants, but cannot furnish the yarn from their own mills, they are being quoted emergency shipments at the old high prices, they state. On counts they have in supply, they are doing the same thing when asked to favor other suppliers.

Preferred makes of combed yarn brought up to 42c for 24s single peelers on cones and 45c was paid for small amounts of 30s singles. Reports of a few quality mills quoting or accepting much beneath their asking prices were disproved. A leading combed make has been revised from 47c for 30 singles to 46c., with opportunity to trade off possible 1c a pound on larger business.

Southern Single Skeins

8s	30
10s	30 1/2
12s	31
14s	31 1/2
20s	33
26s	35 1/2
30s	37 1/2
36s	41 1/2
40s	44 1/2

Southern Single Warps

10s	30 1/2
12s	31
14s	31 1/2
16s	32
20s	33
26s	35 1/2
30s	37 1/2
40s	45

Southern Two-Ply Chain Warps

8s	30 1/2
10s	31
12s	31 1/2
16s	34 1/2
20s	36 1/2
24s	38 1/2
26s	39 1/2
30s	41 1/2
36s	45

Southern Two-Ply Skeins

8s	30 1/2
10s	31
12s	31 1/2
14s	32 1/2
16s	34 1/2
20s	36 1/2
24s	38 1/2
26s	39 1/2
30s	41 1/2

Two-Ply Plush Grade

12s	33 1/2
20s	37 1/2
16s	34
30s	42

Duck Yarns, 3, 4 and 5-Ply

8s	30 1/2
10s	31
12s	31 1/2
14s	33
16s	34 1/2
20s	37

Carpet Yarns

Tinged carpet, 8s, 3 and 4-ply	28
Colored strips, 8s, 3 and 4-ply	27
White carpets, 8s, 3 and 4-ply	30

Part Waste Insulating Yarns

8s, 2-ply	26
8s, 2, 3 and 4-ply	27
10s, 2, 3 and 4-ply	28 1/2
12s, 2-ply	29
16s, 2-ply	32
20s, 2-ply	35
30s, 2-ply	39

Southern Frame Cones

8s	29 1/2
10s	30
12s	30 1/2
14s	31
16s	31 1/2
20s	32 1/2
22s	33 1/2
24s	34 1/2
26s	35 1/2
28s	36 1/2
30s	39 1/2

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Cotton Merchants

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Eastern and Western Growth Cotton

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Hand Looms—over 100 years ago

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New Automatic High Speed Looms

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use Holbrook Pickers for

Quality and Service

Business Established 1822

Over 100 Years of Service

Holbrook Raw Hide Co.

Providence, R. I.

1822

1936

Power Discussed At Master Mechanics' Meeting

(Continued from Page 33)

it is too much of a job.

Mr. D.: Whenever the supply clerk receives a requisition for a certain article, he writes out an order for it. That order is first signed by the overseer of that particular department. Like Mr. Kincaid and some of the other gentlemen, I do not think the master mechanic has time to know how many parts to keep on hand or to have supervision over the supply room, and I do not think that a \$15 or \$20-a-week man has any business being placed in charge of a supply room. I think if you are going to have one man in charge of the supply room, and he is going to order supplies for the overseers, you should have a higher priced man than a \$15 or \$20-a-week man.

Mr. Queen: May I say another word? I should like to ask if you do not think the supply room clerk should have had at least two years' practical shop experience?

Chairman: Will someone answer that question for us? I tell you what I think about it; I think the supply room is a job that should be handled through the office. Each overseer is a competent man, and he ought to know what he is going to use for his department, and there ought to be enough pressure brought on him that he does not over-order. The supply room man should be under the office and keep a record of it. Let the weaver order his supplies, and the carder order his, and the machine shop order theirs. I don't think it makes much difference whose payroll the supply room man is on, but he has to be a competent man. Most of his work is records, if you keep a correct cost on the supply room. The stores man is just a clerk, and you go to him to get something on requisition just as you would go out to a hardware store to get something. Most of the work in the supply room is records; the supply man wants to be sure that the charge is put to the right department. Most of that work is handled through the office, so that is why I think he should be under the office manager.

Is there any more discussion on that?

I have a question here that was handed in for discussion, which we might take up now. It reads: "*Can enough pressure brought to bear upon machine manufacturers to cause them to use United States standard threads on bolts, machine screws, set screws, etc.?*"

I happened to look into that the other day; we bought some second-hand machines, and we did run into some 12-thread set screws. Let's hear from somebody on that.

A Member: I think we ought to hear from everybody at the same time on that.

Mr. Clark: Wasn't that old equipment? Isn't the new equipment standard?

Chairman: This was old equipment that we got.

Mr. Clark: Doesn't all the new equipment come out standard now?

Chairman: I think it does. This was old equipment, and it was the first time I had run into it.

Isn't it true that if you were to ask the manufacturers to put in a 13-thread or put in the standard thread they would do it for you? If you were to buy a part from some manufacturer that does not use standard, and you specified a standard piece of equipment, wouldn't he give it to you that way?

Mr. Nichols: I don't know, Mr. Chairman, whether they would or not. They use their standard.

Chairman: What do you think of that, Mr. Queen?

Mr. Queen: I should like to see standard threads used all the way through. I have a lot of old machinery and it has half-inch 12-thread on it. Of course, I have to keep two sets of taps and dies. I think all machinery should come out with United States Standard thread.

Chairman: When you get parts for those old machines, do you specify 12-thread set screws, for instance?

Mr. Queen: No, sir. If we have to buy new parts we change the thread. It so happens they give us quite a bit of trouble. We make a good many new parts for them.

Chairman: If you should buy new parts for those old machines, will they furnish them with 12 threads?

Mr. Queen: They will send them with 12-thread unless we specify 13-thread.

Chairman: They do not give you what you ask for?

Mr. Queen: Oh, yes, they give you what you want.

Mr. E.: Would it be advisable for this body to go on record as recommending to the manufacturers of textile machinery that they adopt the United States standard threads for all such machinery and parts?

Chairman: I think it would be. Does this body of men want to go on record about that?

Mr. E.: I move that we make such a recommendation to them.

The said motion received a second and, when put to vote, was carried.

Chairman: Gentlemen, it is about time for adjournment. Before that, however, I want to say, as chairman, that we want our meetings to be as interesting as possible for everybody. I wonder what sort of program you would like to have at these meetings. Would you like to have someone come and demonstrate machines to you? What is your idea about it? What can we do to make our meetings more interesting than they are?

Mr. F.: Mr. Chairman, I think we have a good meeting started right now, just when we are ready to quit. I like to hear the discussion, myself.

Mr. Clark: I have been attending a good many of these sectional meetings, and I think no greater mistake can be made than in trying to have set speeches. I have seen in some of the divisions the men quit coming because of the bringing in of speakers, particularly of a speaker who has an axe to grind in selling his own product. I think the master mechanics' section is doing wonderful work. The master mechanics are making great savings in power, in the use of coal, etc.

There is one thing I should like to bring up. Most of the superintendents today are graduates of textile schools. In the master mechanics' division the men are coming up from the machine shop. Very few men are coming in from the textile schools, because they do not have the practical work. The master mechanics are interested in saving heat, saving fuel, saving electric power; and I wonder if it would be worth while to hold in Charlotte, during the summer, about a three-day school for master mechanics. We had in mind getting two or three men from State College and two or three men from the Duke Power Company and holding such a school for master mechanics who want to learn something about electricity and steam, particularly. We should have to charge a small tuition fee, probably about five dollars, to pay the men who come here to teach. Do you think, if we should try to establish such a school here in Charlotte for three days and bring in these men to teach, we could not about fifty young master mechanics to come here and study for

that time? If you think so, the TEXTILE BULLETIN will be glad to put on something of that kind. I should like to have your opinion as to whether or not a school of that kind would be worth while and if it would be attended.

Chairman: What do you think about such a school, gentlemen?

Mr. Kincaid: I think Mr. Clark has a splendid idea. Five years from now, unless we fellows keep up who do not have a higher education, we are going to have to get down, so to speak, because the men who have special training are going to get in these places. Special training is getting more important every day. If we do not keep abreast of the times in theory as well as in the practical side of the work we are going to be in the background a few years from now; it may be five or it may be ten.

Mr. Smith: I am heartily in favor of such a movement and should be glad to see this body of men go on record as being in favor of it and should be glad to see every man here attend the school. I should like to see this body of men keep their discussions for themselves and not have any outside body of salesmen. Let's keep our discussions on something interesting to us.

S. D. Berg, Sales Engineer, Fafnir Bearing Co., Charlotte: I should like to say a few words, because I think the salesmen are entitled to a little consideration. The school and colleges invite salesmen to come to them and talk to them, so as to give the students the benefit of their knowledge. Why should the master mechanics lock them out?

Mr. Clark: Mr. Berg, I do not think that is the intention of the master mechanics, at all. But I think these men develop more from their own discussion. If we bring a man here who makes a set speech, then the discussion is limited.

Mr. Smith: Mr. Chairman, I did not intend that in the way Mr. Berg took it; I did not intend that we should keep out the salesmen. But our time is limited.

A Member: Mr. Chairman, I want to tell you that you are doing a good job. These meetings are intensely practical. I think you are to be congratulated on doing the type of work you have done among these men. I think if you go on as you have been going and keep the interest alive by presenting practical questions and having some men prepared beforehand to enter into the discussion and start the ball rolling you are going to help the men get a better understanding of their problems. I do not think, however, you ought to rule out all of the technical questions. Once in a while something of real interest comes up. But the question of whether to turn over the entire meeting to that subject is one that has to have consideration. I have seen meetings of this organization where we were bored to death by some technical dissertation on something in which very few of us were interested. We ought to avoid that. But there is no question as to the logical and proper manner of handling these meetings. Men like you ought to be congratulated on maintaining and increasing the interest.

As to the thing that Mr. Clark has on his heart, the school idea, I wish such a thing as that could take place. I bewail my lack of technical knowledge. I left school at 11 years of age. I have burned the midnight oil, just as many of you boys have done. But my regret is that I do not know more of the theory.

Mr. Thompson: I think such a school would be very beneficial, especially to the young fellows. We have had in our schools at Albemarle during the last year a series

of courses being taught by some able teacher in our school and paid for by the Federal Government, and I have been taking a course in mechanical drawing. It does not cost anything except for supplies, and it is very beneficial. I am sure that a school of this kind lasting for a few days would be worth everything it would cost the individual or the company which might send its master mechanic.

Mr. Queen: I should like to make a suggestion. I happen to have had a couple of years' practical experience in a motor repair shop, but when I went to work in a textile plant I learned how little I knew about motors. If this school could be arranged I should like to have a man there who could give us a course on motor repairing. I think a practical course along that line would go a long way to help the master mechanic in the mill.

Chairman: Is there any further discussion? If not, is there any business to come up?

Mr. Clark: Mr. Chairman, I should like to introduce the new secretary of our Association. As most of you gentlemen know, Mr. Hill died in January. The board of directors of the Association recently elected Mr. B. Ellis Royal as secretary, and he has agreed to serve until the annual meeting in June. Mr. Royal also is my associate editor. I want to present him now.

B. Ellis Royal, Secretary: I am glad to have had this opportunity of attending the master mechanics' meeting, and I have enjoyed it very much. I shall not take up your time further, except to ask that you fill out the registration cards which have been distributed, so that we shall have a record of the attendance. I also wish to say that the annual meeting in June will be held at Myrtle Beach, and we hope to see every one of you there.

Chairman: Gentlemen, it is time to adjourn. If you have any suggestions for the next meeting, send them in to the committee. If there is no further business, we will now adjourn.

Mr. Clark: Gentlemen, I want to propose a unanimous vote of thanks to the chairman. Those in favor of that, rise. (All rose, and the meeting adjourned.)

South Leading Textile Field

The lower South leads the nation in sectional activities among 14 major textile industries, it was shown by a compilation in a recent issue of a trade paper.

Sources of the table are Davidson's 1936 Textile Blue-book and the 1933 census of manufacturers.

The lower South section accounted for 31.85 per cent of workers employed in the textile industry, with 320,312. North Carolina led the group with 134,458 workers, or 13.37 per cent of the group total. South Carolina was second, her 80,781 workers composing 8.03 per cent of the total group. Other States followed in this order: Georgia, Alabama, Florida, and Mississippi.

In groups the New England section was second, its 255,144 employees composing 25.36 per cent of the total. Other sections were: Middle Atlantic, 206,489 employees, 20.52 per cent; upper South, 73,530 employees, 7.31 per cent; New York, 64,015 employees, 6.36 per cent; Middle West, 41,529 employees, 4.13 per cent.

The lower South's activity was predominantly in cotton goods, the report showed. Of the total of 320,312 employees, 250,838 were employed in this phase of the textile industry.

Safety Rules

If you, as an overseer or second hand, had an employee missing from your department for two days and passed him on the street and he claimed he strained his back about a week ago, what should be done?

The foregoing should be done in the following order:
Investigation

(a) Overseer should ask who saw accident, if mention was made to any fellow workman at time injury occurred—what fellow workman told injured. How near was closest fellow workman at the time that injury occurred—if not mentioned to anyone. Was anyone told of injury during remainder of shift?

(b) Overseer should determine just exactly where injury occurred, how material was stored, was there ample work space? Was employee in his own department? Get employee to point out exact position of all surrounding objects and persons. Did employee slip (check floor)?

(c) Overseer should determine exact hour during day or night that injury occurred, was employee on duty at that time. Was floor being scrubbed at this time? Check scrubbers.

(d) Overseer should determine if employee was performing own duties, "lending a hand," "strong arming" (showing off), did he ask for help? Was he speeding? Is he getting too old for job? What about his health? What about his general habits off the job? Had he complained about the work being heavy? Has he complained about rheumatism—especially during bad weather? Was he in proper position? If being helped or helping—did fellow employee fall?

(e) Overseer should find why employee did not report injury as soon as happened. Had employee been instructed to report all injuries promptly?

Preventatives

Question any witnesses separately—get details. If cases stored flat—floor strips should be used. If trucking—check condition of equipment, look for dry bearings. Check floor for holes, objects on floor, wet or oily floor, crowded operations or crowded space. What about lighting conditions? Correction of poor conditions or make recommendations to superintendent. Reroute material if possible while floor is being scrubbed. Sprinkle sand on wet spots from leaking humidifiers or condensation or leaking bearings until conditions can be reported and repaired. Properly instruct employee as to duties and territory to be covered in department or plant. Issue instructions as to man power to be used in lifting or material handling operations. Properly instruct employees in proper position—point out need of co-ordinating—insist on using proper vehicles and equipment. Discourage "strong arm" methods. If employee is too old, too light, sickly, intemperate or a rheumatic—transfer to lighter work, point out reason for transfer to employee. Require prompt report of injury, keep record of injury, date, hour, and witnesses involved. Observe employees during shift—correct any improper position or unsafe condition or practice.—*National Safety Council.*

Consolidated Textile Henderson Plant Sale Approved

Federal Judge Goddard recently approved the sale of the Henderson, Ky., plant of the Consolidated Textile Corporation for \$125,000 to L. A. Parker and associates, and gave the Chase National Bank, trustee under a blanket mortgage on all the Consolidated concern's plants, permission to release the Henderson property from the mortgage.

The plant, it was stated, cost the Consolidated company \$12,152 in 1934, \$14,321 in 1935 and \$15,292 in 1936 for shut down expenses. A long series of figures by engineers on its value under varying conditions was put into the record, but the liquidation value was placed at \$125,000 and representatives of both bondholders, general creditors, and others joined in recommending the acceptance of the Parker offer.

Burlington Mills To Sell Common Stock

A syndicate headed by Lehman Bros. and including Commercial Investment Trust, Inc.; A. G. Becker & Co., Inc.; Hallgarten & Co., and R. S. Dickson & Co., Inc., of Charlotte, N. C., are offering at \$18 a share 188,800 shares of the 198,800 shares of common stock of Burlington Mills Corporation purchased by them.

The registration statement filed with Securities and Exchange Commission covered 247,911 shares of common stock and stock purchase warrants evidencing rights to purchase an aggregate of 39,111 shares of common stock. Of the remaining 59,111 shares of Burlington Mills Corporation common stock registered with the commission. The corporation is informed that 10,000 shares to be purchased by Commercial Investment Trust, Inc., will be reserved from the initial public offering. Ten thousand shares are reserved for issue to officers and employees, and 39,111 shares are reserved for issue upon exercise of the stock purchase warrants.

Burlington Mills Corporation recently acquired all the assets, property and good will, subject to liabilities, of Burlington Mills Co., Inc., Rayon Fabrics Corporation and Duchess Fabrics Corporation, North Carolina corporations.

Of the net proceeds of the present financing approximately \$210,000 is expected to be expended for improvements and additions to present plants; \$850,000 for the purchase of looms; \$100,000 for the purchase of throwing spindles; and \$315,000 for the acquisition of four additional plants. The net profit of predecessor companies was \$1,118,434 in 1936. Equivalent to \$2.03 a share on 549,071 common shares to be outstanding after sale of 198,800 shares to the underwriters. The corresponding figures in 1935 and 1934, respectively, were \$1,103,372 or \$2.01 share and \$945,694 or \$1.72 share.

After deducting Federal undistributed profits taxes for 1936 of 147,866, the final net profit after all charges was \$970,568, or \$1.76 share.

Classified Department

PATENTS

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WANTED—SCRAP IRON

In carload lots, F.O.B. cars, or our crew will load. Can use all grades, including heavy engines and boilers; pay spot cash. Also buy non-ferrous metals. Please get our offer before selling.

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Box 1161 Greenville, S. C.
Telephone 1447

FOR SALE—Type CW Westinghouse motor, 40 h.p. variable speed, 550 volts, 3 phase, 60 cycles. Three grids and drum controller, no pulley. Never been used. Priced low. Dept. of Ceramic Engineering, N. C. State College, Raleigh, N. C.

WANTED—Live wire salesman who contacts mill superintendents, buyers, etc., to take on an additional line. Address "Live Wire," care Textile Bulletin.

POSITION OPEN—Small cotton mill located in attractive city has opening for practical man with technical knowledge to take care of weaving department. Draper Model E looms on colored work. Excellent opportunity for advancement. State fully experience and salary expected which will be kept strictly confidential. Address "Opportunity," care Textile Bulletin.

Splendid Opening for Size Demonstrator

With one of the country's largest and best known manufacturers of textile products. The man we are seeking must be between 35 and 45 years of age, and well educated with a background of practical training in weaving and slashing operations, and a hustler. Southern territory. Give full particulars in first letter, including references and record of experience. Address Demonstrator, care Textile Bulletin.

WANTED—Remnants of any kind of woven or knit goods, including knitted tops which can be used for hooked rug making. Also yarns and twine. Also want large-flowered purple-blue and maroon gladioli; red-wine and purple Pompon dahlias; large-flowered double and all-color hardy carnations; chrysanthemums; phlox; hibiscus; hollyhocks; vines.

Would like to trade for any of above, hooked rugs; evergreen trees, such as hemlock, spruce, rhododendrum; hardy ferns, such as galax, and other native mountain plants. Anyone interested write first, send stamp for reply. Miss Lou Venia Presnell, Matney, N. C.

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A fare for every purse...!
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Good in Sleeping and Parlor Cars on payment of proper charges for space occupied

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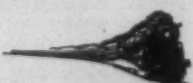
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Washington, D. C.



SOUTHERN RAILWAY SYSTEM

New Cellulose Source

The South Manchurian Railway Company is reported to be establishing a laboratory for developing the recovery of cellulose from the husks of soya beans and reed grass. It is hoped eventually to produce sufficient cellulose to satisfy the requirements of the textile and paper industries in Manchukuo, and in addition to export large quantities to Japan.

Marshall Field & Co.

Closes Hosiery Mill

Philadelphia, Pa.—Marshall Field & Co. have made known officially the discontinuance of its hosiery mill here, stating this change is part of the firm's broad curtailment of its hosiery business and coincides with similar changes elsewhere in the country.

Employees received special payment of a separation allowance, based on length of service.

The Philadelphia plant employed nearly 500 persons, and it is understood some of the machinery is being moved to its hosiery plant at Fieldale, Va.

One of the basic policies of the McKinsey administration is to concentrate the manufacturing activities, with few exceptions, in the Fieldale and Spray, N. C., area.

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABBOTT MACHINE CO., Wilton, N. H. Sou. Agt., L. S. Ligon, Greenville, S. C.

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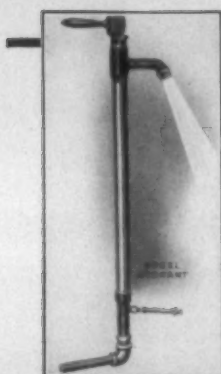
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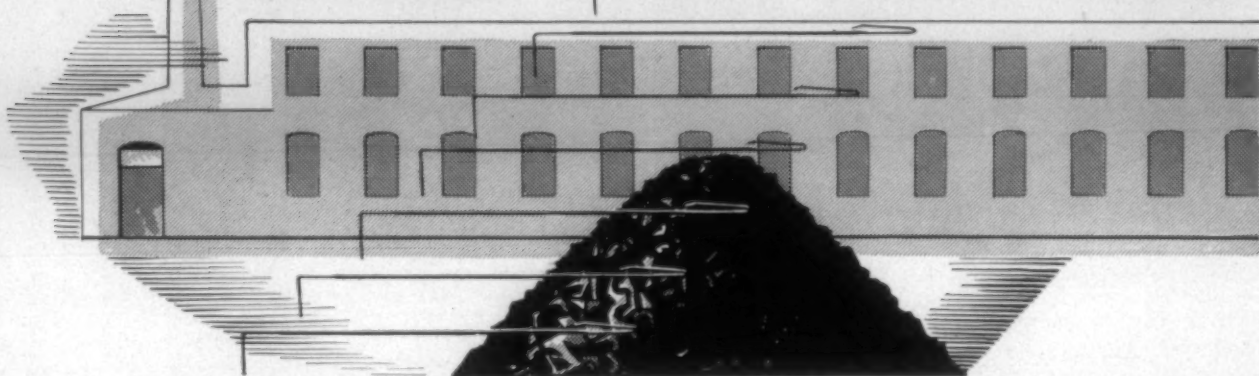
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